**IFIP SECRETARIAT**

**HOFSTRASSE 3**  
**A-2361 LAXENBURG**  
**AUSTRIA, EUROPE**

<table>
<thead>
<tr>
<th>Role</th>
<th>Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Secretary</td>
<td>Eduard DUNDLER</td>
</tr>
</tbody>
</table>
| Administrative Assistants | Brigitte BRAUNEIS  
|                       | Marion SMITH    |

<table>
<thead>
<tr>
<th>Contact Information</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Telephone:</td>
<td>+43 2236 73 616</td>
</tr>
<tr>
<td>Telefax:</td>
<td>+43 2236 73 616 9</td>
</tr>
<tr>
<td>e-mail:</td>
<td><a href="mailto:ifip@ifip.org">ifip@ifip.org</a></td>
</tr>
<tr>
<td>Internet-URL:</td>
<td><a href="http://www.ifip.org">http://www.ifip.org</a></td>
</tr>
</tbody>
</table>
# TABLE OF CONTENTS

IFIP'S PAST PRESIDENTS ........................................................................................................... 4
IFIP'S HONORARY MEMBERS .................................................................................................. 4
INTRODUCTION ......................................................................................................................... 5
IFIP'S MISSION STATEMENT ..................................................................................................... 5
IFIP IN PERSPECTIVE ................................................................................................................. 6
ORIGINS ....................................................................................................................................... 6
MEMBERSHIP .............................................................................................................................. 6
ORGANISATION .......................................................................................................................... 6
CONGRESSES AND MAJOR CONFERENCES ............................................................................... 6
TECHNICAL ACTIVITIES ........................................................................................................... 6
PUBLICATIONS .......................................................................................................................... 7
IFIP NEWS .................................................................................................................................... 7
RELATIONSHIPS ......................................................................................................................... 7
IFIP SECRETARIAT ..................................................................................................................... 7
STANDARD INFORMATION ........................................................................................................ 8
IFIP COUNCIL ............................................................................................................................. 8
IFIP GENERAL ASSEMBLY ......................................................................................................... 9
Honorary Members ..................................................................................................................... 9
Country Representative Members ............................................................................................ 10
Members at Large ....................................................................................................................... 16
Ex-Officio Members ................................................................................................................... 17
Associate Members ................................................................................................................... 18
TC 8 - INFORMATION SYSTEMS .............................................................................................. 56
TC 9 - ICT AND SOCIETY ......................................................................................................... 66
TC 10 - COMPUTER SYSTEMS TECHNOLOGY .................................................................... 74
TC 11 - SECURITY AND PRIVACY PROTECTION IN INFORMATION PROCESSING SYSTEMS .... 78
TC 12 - ARTIFICIAL INTELLIGENCE ....................................................................................... 87
TC 13 - HUMAN-COMPUTER INTERACTION ...................................................................... 92
TC 14 - ENTERTAINMENT COMPUTING ........................................................................... 99
TECHNICAL COMMITTEE AND WORKING GROUP - AIMS AND SCOPES ...................... 104
   TC 1 - Foundations of Computer Science - Aims and Scopes .............................................. 104
   TC 2 - SOFTWARE: Theory and Practice - Aims and Scopes ............................................. 110
   TC 3 - Education - Aims and Scopes ................................................................................... 119
   TC 5 - Information Technology Applications - Aims and Scopes ...................................... 122
   TC 6 - Communication Systems - Aims and Scopes .......................................................... 130
   TC 7 - System Modeling and Optimization - Aims and Scopes ........................................ 136
   TC 8 - Information Systems - Aims and Scopes ................................................................ 140
   TC 9 - ICT and Society - Aims and Scopes ..................................................................... 145
   TC 10 - Computer Systems Technology - Aims and Scopes ........................................... 152
   TC 11 - Security and Privacy Protection in Information Processing Systems - Aims and Scopes ....... 157
   TC 12 - Artificial Intelligence - Aims and Scopes ............................................................... 166
   TC 13 - Human-Computer Interaction - Aims and Scopes ............................................... 172
   TC 14 - Entertainment Computing - Aims and Scopes ...................................................... 178
IFIP PUBLICATIONS .................................................................................................................. 185
NAME INDEX ............................................................................................................................ 186
IFIP’s PAST PRESIDENTS

Isaac L. Auerbach U.S.A. 1960 - 1965
Ambros B. Speiser Switzerland 1965 - 1968
Anatol A. Dorodnicyn Russia 1968 - 1971
Heinz Zemanek Austria 1971 - 1974
Pierre A. Bobillier Switzerland 1977 - 1983
Kaoru Ando Japan 1983 - 1986
Ashley W. Goldsworthy Australia 1986 - 1989
Asbjorn Rolstad Norway 1992 - 1995
Kurt Bauknecht Switzerland 1995 - 1998
Peter Bollerslev Denmark 1998 - 2001
Robert Aiken U.S.A. 2001
Walter Grafendorfer Austria 2001 - 2002
Klaus Brunnstein Germany 2002 - 2007
Basie von Solms South Africa 2007 - 2010
Leon Strous Netherlands 2010 - 2016

IFIP’s Honorary Members

1970: Mr Isaac L. Auerbach IFIP President 1960 - 1965 †1992
1977: Prof. Dr. Heinz Zemanek IFIP President 1971 - 1974 †2014
1979: Dr. Richard Tanaka IFIP President 1974 - 1977
1991: Dr. Kaoru Ando IFIP President 1983 - 1986
1997: Prof. Asbjorn Rolstad IFIP President 1992 - 1995
1998: Mr Aage Melbye IFIP Honorary Treasurer 1990 - 1996
1999: Prof. Ashley W. Goldsworthy IFIP President 1986 - 1989
1999: Mr Graham Morris IFIP Honorary Secretary 1996 - 1999
2011: Prof. Dr. Klaus Brunnstein IFIP President 2002 - 2007 †2015
2014: Prof. Sebastiaan von Solms IFIP President 2007 - 2010
INTRODUCTION

This publication is an edited subset of a comprehensive database which is regularly updated and is accessible through international networks. In particular the “electronic Bulletin” contains detailed statements of aims and scope for every Working Group.

A wide range of information is available electronically from the IFIP secretariat including the IFIP News, minutes of our General Assembly and Board meetings, IFIP documents and other valuable information on IFIP and its activities.

There are also links to pages of information about our Members and Technical Committees.

Access may be obtained as follows:

URL: http://www.ifip.org

IFIP’s MISSION STATEMENT

IFIP’s mission is to be the leading, truly international, apolitical organization which encourages and assists in the development, exploitation and application of Information Technology for the benefit of all people.

Principal Elements

1. To stimulate, encourage and participate in research, development and application of Information Technology (IT) and to foster international co-operation in these activities.

2. To provide a meeting place where national IT Societies can discuss and plan courses of action on issues in our field which are of international significance and thereby to forge increasingly strong links between them and with IFIP.

3. To promote international co-operation directly and through national IT Societies in a free environment between individuals, national and international governmental bodies and kindred scientific and professional organizations.

4. To pay special attention to the needs of developing countries and to assist them in appropriate ways to secure the optimum benefit from the application of IT.

5. To promote professionalism, incorporating high standards of ethics and conduct, among all IT practitioners.

6. To provide a forum for assessing the social consequences of IT applications; to campaign for the safe and beneficial development and use of IT and the protection of people from abuse through its improper application.

7. To foster and facilitate co-operation between academics, the IT industry and governmental bodies and to seek to represent the interest of users.

8. To provide a vehicle for work on the international aspects of IT development and application including the necessary preparatory work for the generation of international standards.

9. To contribute to the formulation of the education and training needed by IT practitioners, users and the public at large.
IFIP IN PERSPECTIVE

Origins
IFIP traces its roots to the very first major international conference on computers and computing which was held in Paris in 1959 under the auspices of UNESCO. Representatives of the main computer societies active in computing got together at that meeting to explore ways of building on the achievements of the conference. As a result thirteen national computer societies agreed to found in 1960 an international federation and named it IFIP - the International Federation for Information Processing.

IFIP’s principal aims were and are to foster international cooperation, to stimulate research, development and applications and to encourage education and the dissemination and exchange of information on all aspects of computing and communication.

IFIP’s creation was well timed. In the 1960s there began a veritable explosion in the growth of the computer industry and in the application of its products. Within the life-span of IFIP information technology (as it is widely known today) has become a potent instrument affecting people in everything from their education and work to their leisure and in their homes. It is a powerful tool in science and engineering, in commerce and industry, in education and administration and in entertainment.

Membership
Today IFIP has 41 organizations as Full Members, 2 International Members at Large and 4 Associate Members, representing countries from all regions of the world.

Organisation
A General Assembly of all its Members and TC Chairs takes place annually and has overall responsibility for all of IFIP’s strategy, finance and activities. It elects a President, four Vice-Presidents, a Honorary Treasurer, a Honorary Secretary and eight Councillors who together form the IFIP Board.

Congresses and Major Conferences
IFIP’s flagship event is its World Computer Congress, currently held biannually. The 22nd IFIP World Congress was held in Amsterdam, The Netherlands from 24 to 26 September, 2012 (http://www.wcc-2012.org/). The 23rd IFIP World Congress was held in Daejeon, Republic of Korea from 4 to 7 October, 2015 (http://www.wcc-2015.org). The 24th IFIP World Congress will be in Poznan, Poland in September 2018.

The nature of these Congresses has changed substantially over the years. They are no longer of the all-singing and -dancing variety addressing every conceivable facet of our field. Instead they consist of a number of independent conferences, each dealing with a major specialised subject. These run in parallel so that some more general keynote addresses can be attended by all participants who can also share in social and other activities.

In addition there are major international conferences organised by our Technical Committees. These include events dealing with Production Engineering, Security, Computers in Education and Human Computer Interaction.

Technical Activities
At the heart of IFIP lie its Technical Committees that, between them, count on the active participation of some two thousand people world-wide. There are thirteen such Committees. Each Technical committee is, in effect, a management team responsible for a given field of activity and for the work of from five to thirteen Working Groups, a total of 101. These Groups work in a variety of ways to share experience and to develop their specialised knowledge. These include open conferences, smaller working conferences, seminars and tutorials, circulated papers and, increasingly, as befits our subject, electronic conferencing and e-mail.
Publications
Many IFIP events are linked to publications and there are annually some 30 to 40 IFIP books. Our principal publisher is

Springer-Verlag GmbH
e-mail: ifip@springer.com

IFIP News
A vital element of IFIP’s communication with its Members and with all who participate in our work is the IFIP Newsletter. This is published quarterly in electronic form and is published on IFIP’s website www.ifip.org.

Relationships
IFIP enjoys friendly cooperation with a number of international organisations. First among these is UNESCO with which IFIP maintains a formal consultative relationship. UNESCO has commissioned from IFIP several projects and supports the participation of some people from developing countries in IFIP events. IFIP is a Scientific Associate of ICSU (International Council of Scientific Unions).

There are four international federations with which IFIP collaborates. These are IFAC (International Federation of Automatic Control), near neighbours of ours in Laxenburg, IMACS (International Association for Mathematics and Computers in Simulation), IFORS (International Federation of Operational Research Societies) and IMEKO (International Measurement Confederation).

IFIP Secretariat
The administrative hub of IFIP is our secretariat at Laxenburg, near Vienna. Eduard Dundler, the General Secretary of IFIP, with the assistance of Brigitte Brauneis and Marion Smith is responsible for the wide range of administrative tasks vital to the operation of such a far-flung international body. Good communication and information are essential and our secretariat provides a comprehensive service using up-to-date technology.
# STANDARD INFORMATION

## IFIP COUNCIL

### EXECUTIVE BOARD

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
<th>Ex officio</th>
<th>Years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mike Hinchey</td>
<td>President</td>
<td>Ex officio</td>
<td>2016 - 2019</td>
</tr>
<tr>
<td>Leon Strous</td>
<td>Immediate Past President</td>
<td>Netherlands</td>
<td>2016 - 2017</td>
</tr>
<tr>
<td>Max Bramer</td>
<td>Vice President</td>
<td>Ex officio</td>
<td>2013 - 2019</td>
</tr>
<tr>
<td>Yuko Murayama</td>
<td>Vice President</td>
<td>Japan</td>
<td>2014 - 2017</td>
</tr>
<tr>
<td>Gabriela Marin-Raventos</td>
<td>Vice President</td>
<td>Ex officio</td>
<td>2016 - 2019</td>
</tr>
<tr>
<td>Kai Rannenberg</td>
<td>Vice President</td>
<td>Germany</td>
<td>2015 - 2018</td>
</tr>
<tr>
<td>A Min Tjoa</td>
<td>Secretary</td>
<td>Austria</td>
<td>2013 - 2019</td>
</tr>
<tr>
<td>Declan Brady</td>
<td>Treasurer</td>
<td>Ireland</td>
<td>2014 - 2017</td>
</tr>
</tbody>
</table>

### COUNCILLORS

<table>
<thead>
<tr>
<th>Name</th>
<th>Country</th>
<th>Years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yasas Abeywickrama (GA)</td>
<td>Sri Lanka</td>
<td>2015 - 2018</td>
</tr>
<tr>
<td>Jee-In Kim (GA)</td>
<td>Korea</td>
<td>2016 - 2019</td>
</tr>
<tr>
<td>Jerzy Nawrocki (GA)</td>
<td>Poland</td>
<td>2013 - 2017</td>
</tr>
<tr>
<td>Franz Rammig (GA)</td>
<td>Ex officio</td>
<td>2013 - 2019</td>
</tr>
<tr>
<td>Michael Goedicke (TA)</td>
<td>TC2</td>
<td>2012 - 2019</td>
</tr>
<tr>
<td>Maria Raffai (MS)</td>
<td>Hungary</td>
<td>2016 - 2019</td>
</tr>
<tr>
<td>Raimundo Macedo (Pr.)</td>
<td>Brazil</td>
<td>2015 - 2018</td>
</tr>
<tr>
<td>Anthony Wong (IP3)</td>
<td>Australia</td>
<td>2012 - 2019</td>
</tr>
</tbody>
</table>
**IFIP GENERAL ASSEMBLY**

*Honorary Members*

Prof. Kurt **BAUKNECHT**
Univerraet Zurich
Inst.f. Informatik
Winterturerstrasse 190
CH-8057 ZURICH, Switzerland
Tel. +41 1 63 54310
Fax +41 1 63 56809
e-mail: baukn@ifi.unizh.ch

Prof. Pierre A. **BOBILLIER**
128 Rte de Soral
CH-1233 LULLY, Switzerland
Tel. +41 22 757 2021
Fax +41 22 757 6726
e-mail: pa.bobillier@gmail.com

Prof. Ashley W. **GOLDSWORTHY**
10/76 Thorn St.
Kangaroo Point
BRISBANE, QLD 4169
Australia
Tel. +61 7 3391 0864
Fax +61 7 3391 0868
e-mail: ashleyg@ozemail.com.au

Mr. Aage **MELBYE**
Morlenesvej 11
DK-2840 HOLTE
Denmark
Tel. +45 4542 2912
e-mail: melbye@tdcadsl.dk

Mr. Graham **MORRIS**
43 Pewley Hill
GUILDFORD, Surrey GU1 3SW
United Kingdom
Tel. +44 1 483 566 933
Fax +44 1 483 836 517

Prof. Asbjorn **ROLSTADAS**
Norw. Univ. of Science & Technology
Dept. of Product. & Quality Eng.
NO-7491 TRONDHEIM
Norway
Tel. +47 73 593 800
Fax +47 73 597 117
e-mail: asbjorn.rolstadas@ntnu.no

Acad. Blagovest **SENDOV**
Center f.Inform.&Comp.Tech.
Acad.G.Bonchev Str., Bl.25A
BG-1113 SOFIA, Bulgaria
Tel. +359 2 708 494
Fax +359 2 707 273
e-mail: sendov2003@yahoo.com

Dr. Richard I. **TANAKA**
10321 Shadyridge Drive
SANTA ANA, CA 92705
U.S.A.
Tel. +1 714 838 7450
e-mail: ritanaka@cox.net

Prof. Basie **von SOLMS**
University of Johannesburg
Auckland Park Kingsway Campus
PO Box 524
Auckland Park
ZA Johannesburg 2006
South Africa
Tel. +27 11 559 2843
Fax +27 11 559 2138
e-mail: basievs@uj.ac.za
## Country Representative Members

<table>
<thead>
<tr>
<th>Country</th>
<th>Society</th>
<th>Representative</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUSTRALIA</td>
<td>Australian Computer Society (ACS)</td>
<td>Mr. Anthony WONG</td>
</tr>
<tr>
<td></td>
<td>P.O. Box Q 534 QVB</td>
<td></td>
</tr>
<tr>
<td></td>
<td>SYDNEY, N.S.W. 1230</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Australia</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Tel. +61 2 9299 3666</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Fax +61 2 9299 3997</td>
<td></td>
</tr>
<tr>
<td></td>
<td>e-mail: <a href="mailto:info@acs.org.au">info@acs.org.au</a></td>
<td></td>
</tr>
<tr>
<td></td>
<td>URL: <a href="http://www.acs.org.au">http://www.acs.org.au</a></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AUSTRIA</td>
<td>Austrian Computer Society (OCG)</td>
<td>Prof. A Min TJ O A</td>
</tr>
<tr>
<td></td>
<td>Wollzeile 1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>AT-1010 VIENNA, Austria</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Tel. +43 1 512 0235</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Fax +43 1 512 02359</td>
<td></td>
</tr>
<tr>
<td></td>
<td>e-mail: <a href="mailto:ocg@ocg.at">ocg@ocg.at</a></td>
<td></td>
</tr>
<tr>
<td></td>
<td>URL: <a href="http://www.ocg.at">http://www.ocg.at</a></td>
<td></td>
</tr>
<tr>
<td>BRAZIL</td>
<td>Sociedade Brasileira de Computação - SBC</td>
<td>Prof. Raimundo José de Araújo MACEDO</td>
</tr>
<tr>
<td></td>
<td>Instituto de Informatica - UFRGS</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Caixa Postal 15012</td>
<td></td>
</tr>
<tr>
<td></td>
<td>BR-91501-970 PORTO ALEGRE, Brazil</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Tel. +55 51 3308 6835</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Fax +55 51 3308 7142</td>
<td></td>
</tr>
<tr>
<td></td>
<td>email: <a href="mailto:supervisao@sbc.org.br">supervisao@sbc.org.br</a></td>
<td></td>
</tr>
<tr>
<td></td>
<td>URL: <a href="http://www.sbc.org.br">http://www.sbc.org.br</a></td>
<td></td>
</tr>
<tr>
<td>BULGARIA</td>
<td>Bulgarian Academy of Sciences</td>
<td>Prof. Kiril BOYANOV</td>
</tr>
<tr>
<td></td>
<td>15 November Street N 1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>BG-1040 SOFIA</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Bulgaria</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Tel. +359 2 989 8446</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Fax +359 2 981 6629</td>
<td></td>
</tr>
<tr>
<td></td>
<td>email: <a href="mailto:boyanov@acad.bg">boyanov@acad.bg</a></td>
<td></td>
</tr>
<tr>
<td></td>
<td>URL: <a href="http://www.ifip.acad.bg">http://www.ifip.acad.bg</a></td>
<td></td>
</tr>
<tr>
<td>CANADA</td>
<td>Canadian Information Processing Society (CIPS)</td>
<td>Mr. Bashir FANCY</td>
</tr>
<tr>
<td></td>
<td>60 Bristol Rd E Unit 8, #324</td>
<td></td>
</tr>
<tr>
<td></td>
<td>MISSISSAUGA, ON L4Z 3K8</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Canada</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Tel. +1 905 602 1370</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Fax +1 905 602 7884</td>
<td></td>
</tr>
<tr>
<td></td>
<td>email: <a href="mailto:info@cips.ca">info@cips.ca</a></td>
<td></td>
</tr>
<tr>
<td></td>
<td>URL: <a href="http://www.cips.ca">http://www.cips.ca</a></td>
<td></td>
</tr>
<tr>
<td>CHINA</td>
<td>Chinese Institute of Electronics - CIE</td>
<td>Mr. Runhua LIN</td>
</tr>
<tr>
<td></td>
<td>Puhuinanli Building No.13, Room 308</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Haidian District, P.O. Box 165</td>
<td></td>
</tr>
<tr>
<td></td>
<td>BEIJING 100036</td>
<td></td>
</tr>
<tr>
<td></td>
<td>China</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Tel. +86 10 6818 0825</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Fax +86 10 6823 9572</td>
<td></td>
</tr>
<tr>
<td></td>
<td>email: <a href="mailto:yangxing@cie-info.org.cn">yangxing@cie-info.org.cn</a></td>
<td></td>
</tr>
<tr>
<td></td>
<td>URL: <a href="http://www.cie-info.org.cn">http://www.cie-info.org.cn</a></td>
<td></td>
</tr>
<tr>
<td>Country</td>
<td>Organization</td>
<td>Address</td>
</tr>
<tr>
<td>--------------</td>
<td>---------------------------------------------------</td>
<td>-------------------------------------------------------------------------</td>
</tr>
<tr>
<td>CROATIA</td>
<td>Croatian Information Technology Association - CITA</td>
<td>Ilica 191e/II, HR-10000 ZAGREB, Croatia</td>
</tr>
<tr>
<td>CYPUS</td>
<td>Cyprus Computer Society</td>
<td>PO Box 27038, CY-1641 NICOSIA, Cyprus</td>
</tr>
<tr>
<td>CZECH REPUBLIC</td>
<td>Czech Society for Cybernetics and Informatics</td>
<td>Pod vodarenskou vezi 2, CZ-182 07 PRAHA 8 - Liben, Czech Republic</td>
</tr>
<tr>
<td>DENMARK</td>
<td>Danish IT Society</td>
<td>Bredgade 25A, DK-1260 COPENHAGEN K, Denmark</td>
</tr>
<tr>
<td>FINLAND</td>
<td>TIVIA</td>
<td>Lars Sonckin kaari 12, FI-02600 ESPOO, Finland</td>
</tr>
<tr>
<td>FRANCE</td>
<td>Société Informatique de France - SIF</td>
<td>23 Boulevard de France, FR-91037 EVRY, France</td>
</tr>
</tbody>
</table>

Mr. Marijan FRKOVIC
President
Croatian Information Technology Association (CITA)
Ilica 191e/II, HR-10000 ZAGREB, Croatia
Tel. +385 1 2222 722, Fax +385 1 2222 723
e-mail: mfrkovic@hiz.hr

Mr. Costas AGROTIS
Government of Cyprus
Ministry of Finance
Director, Department IT Services
NICOSIA, Cyprus
Tel. +357 22 806300, +357 22 754474
Fax +357 22 462876, +357 22 767349
e-mail: cagrotis@cytanet.com.cy

Prof. Jaroslav POKORNY
Charles University in Prague
Faculty of Mathematics and Physics
Dept. of Software Engineering
Malostranské nám. 25, CZ-118 00 PRAHA 1, Czech Republic
Tel. +420 221914 264, Fax +420 221914 323
e-mail: pokorny@ksi.ms.mff.cuni.cz

Prof. Jan PRIES-HEJE
Roskilde University
Dept. of Communication, Business & IT
Build. 42.2, Universitetsvej 1
DK-4000 ROSKILDE, Denmark
Tel. +45 46 743051
email: janph@ruc.dk

Mr. Mika HELENIUS
TIVIA
Lars Sonckin kaari 12, FI-02600 ESPOO, Finland
Tel. +358 400 264 432, Fax +358 20 741 9889
email: mika.helenius@tivia.fi

Prof. Bernard CORNU
115 Boulevard du Pont Achard
FR-86000 POITIERS, France
Tel. +33 674 976 590
email: cornubernard@gmail.com
<table>
<thead>
<tr>
<th>Country</th>
<th>Name</th>
<th>Address</th>
<th>Phone</th>
<th>Fax</th>
<th>Email</th>
<th>Website</th>
</tr>
</thead>
<tbody>
<tr>
<td>Germany</td>
<td>Prof. Dr. Kai RANNENBERG</td>
<td>Deutsche Telekom Chair of Mobile Business and Multilateral Security Goethe University Frankfurt  DE-60629 FRANKFURT/Main Germany</td>
<td>+49 69 798 34701</td>
<td>+49 69 798 35004</td>
<td><a href="mailto:kai.rannenberg@m-chair.de">kai.rannenberg@m-chair.de</a></td>
<td></td>
</tr>
<tr>
<td>Hungary</td>
<td>Prof. Maria RAFFAI</td>
<td>Szechenyi Istvan University Faculty for Information Science and Electrical Engineering Egyetem ter 1 HU-9026 GYÖR, Hungary</td>
<td>+36 96 613 525</td>
<td>+36 96 613 525</td>
<td><a href="mailto:maria.raffai@gmail.com">maria.raffai@gmail.com</a></td>
<td></td>
</tr>
<tr>
<td>India</td>
<td>Prof. Dr. Anirban BASU</td>
<td>Flat # 5154, Pine block Sobha Forest View off. Kanakapura Road Banashankari 6th Stage PO. Thalaghappatpura BANALORE 560062 India</td>
<td>+91 94481 21434</td>
<td>+91 94481 21434</td>
<td><a href="mailto:abasu@pqrsoftware.com">abasu@pqrsoftware.com</a> / <a href="mailto:abasu@anirbanbasu.in">abasu@anirbanbasu.in</a></td>
<td></td>
</tr>
<tr>
<td>Ireland</td>
<td>Mr. Declan BRADY</td>
<td>c/o The Irish Computer Society 87-89 Pembroke Road Ballsbridge DUBLIN 4 Ireland</td>
<td>+353 1 644 7820</td>
<td>+353 1 662 0224</td>
<td><a href="mailto:ifip@ics.ie">ifip@ics.ie</a> / <a href="mailto:bradydt@eircom.net">bradydt@eircom.net</a></td>
<td><a href="http://www.ics.ie">http://www.ics.ie</a></td>
</tr>
<tr>
<td>Italy</td>
<td>Mr. Paolo SCHGOR</td>
<td>AICA - Associazione Italiana per l’Informatica ed il Calcolo Automatico P.le Rodolfo Morandi, 2 20121 MILANO Italy</td>
<td>+39 02 764 55045</td>
<td>+39 02 760 15717</td>
<td><a href="mailto:p.schgor@aicanet.it">p.schgor@aicanet.it</a></td>
<td><a href="http://www.aicanet.it">www.aicanet.it</a></td>
</tr>
<tr>
<td>Japan</td>
<td>Prof. Yuko MURAYAMA</td>
<td>Tsuda College Department of Computer Science 2-1-1 Tsuda-machi, Kodaira-shi JP-TOKYO 187-8577 Japan</td>
<td>+81 42 342 5476</td>
<td>+81 42 342 5476</td>
<td><a href="mailto:yuk.murayama@ifip.org">yuk.murayama@ifip.org</a></td>
<td><a href="http://www.ipsj.or.jp">www.ipsj.or.jp</a></td>
</tr>
<tr>
<td>Country</td>
<td>Organization</td>
<td>Address</td>
<td>Tel.</td>
<td>Fax</td>
<td>Email</td>
<td>URL</td>
</tr>
<tr>
<td>--------------</td>
<td>---------------------------------------------------</td>
<td>----------------------------------------------</td>
<td>------</td>
<td>-------</td>
<td>------------------------------------------</td>
<td>-------------------------------</td>
</tr>
<tr>
<td>Rep. of KOREA</td>
<td>The Korean Institute of Information Scientists</td>
<td>Room 401, Meorijae Bldg. 984-1, Bangbae-3 dong, Seocho-gu, SEOUl 137 849, Rep. of Korea</td>
<td>+82 2 588 9246</td>
<td>+82 2 521 1352</td>
<td><a href="mailto:kiise@kiise.or.kr">kiise@kiise.or.kr</a></td>
<td><a href="http://www.kiise.or.kr/eng">http://www.kiise.or.kr/eng</a></td>
</tr>
<tr>
<td></td>
<td>and Engineers (KISe)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LITHUANIA</td>
<td>Lithuanian Computer Society - LIKS</td>
<td>Gelezinio Vilko g. 12-123, LT-01108 VILNIUS, Lithuania</td>
<td>+370 2 62 05 36</td>
<td>+370 2 61 99 05</td>
<td><a href="mailto:liks@liks.lt">liks@liks.lt</a></td>
<td><a href="http://www.liks.lt">http://www.liks.lt</a></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NETHERLANDS</td>
<td>KNVI</td>
<td>Koninklijke Nederlandse Vereniging van Informatieprofessionals, MOS B.V. t.a.v. de KNVI, Postbus 1058, NL-3860 BB Nijkerk, The Netherlands</td>
<td>+31 33 2473 427</td>
<td></td>
<td><a href="mailto:knvi@mos-net.nl">knvi@mos-net.nl</a></td>
<td><a href="http://www.knvi.net/">http://www.knvi.net/</a></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NEW ZEALAND</td>
<td>Institute of IT Professionals New Zealand</td>
<td>PO Box 10044, WELLINGTON 6143, New Zealand</td>
<td>+64 4 473 1043</td>
<td>+64 4 473 1025</td>
<td><a href="mailto:info@iitp.org.nz">info@iitp.org.nz</a></td>
<td><a href="http://www.iitp.org.nz">http://www.iitp.org.nz</a></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NORWAY</td>
<td>Norwegian Computer Society (NCS)</td>
<td>Mollergata 24, NO-0179 OSLO, Norway</td>
<td>+47 22 36 48 80</td>
<td>+47 22 36 37 01</td>
<td><a href="mailto:post@dataforeningen.no">post@dataforeningen.no</a></td>
<td><a href="http://www.dataforeningen.no">http://www.dataforeningen.no</a></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>POLAND</td>
<td>Polish Academy of Sciences</td>
<td>Plac Defilad 1, PL-00 901 WARSAW, Poland</td>
<td>+48 22 620 49 70</td>
<td>+48 22 620 49 10</td>
<td><a href="mailto:jan.weglarz@put.poznan.pl">jan.weglarz@put.poznan.pl</a></td>
<td><a href="http://www.pan.pl">http://www.pan.pl</a></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Country</td>
<td>Organization</td>
<td>Address</td>
<td>Contact Person</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>--------------</td>
<td>--------------------------------------------------------</td>
<td>--------------------------------------------------------------------------</td>
<td>---------------------------</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PORTUGAL</td>
<td>Ordem dos Engenheiros</td>
<td>Av. António Augusto de Aguiar n.º3D - LISBOA</td>
<td>Prof. Ricardo J. MACHADO</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Portugal</td>
<td>ALGORITMI Research Centre</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Tel. +351 213 132 607</td>
<td>Dept. Information Systems</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Fax +351 213 132 615</td>
<td>Escola de Engenharia</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>email: <a href="mailto:jvlopes@ordemdosengenheiros.pt">jvlopes@ordemdosengenheiros.pt</a></td>
<td>Universidade do Minho</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>URL: <a href="http://www.ordemengenheiros.pt">http://www.ordemengenheiros.pt</a></td>
<td>Campus Azurém</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Tel. +351 253 510 319 / 790</td>
<td>PT-4800-058 GUIMARAES</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Fax +351 253 510 300</td>
<td>Portugal</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>email: <a href="mailto:rmac@dsi.uminho.pt">rmac@dsi.uminho.pt</a></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SERBIA</td>
<td>Informatics Association of Serbia (IAS)</td>
<td>Kneza Milosa 9, RS-11000 BEOGRAD</td>
<td>Mr. Nikola MARKOVIC</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Serbia</td>
<td>President</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Tel. +381 63 253 583</td>
<td>Informatics Association of Serbia (IAS)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>email: <a href="mailto:office@dis.org.rs">office@dis.org.rs</a></td>
<td>Kneza Milosa 9, RS-11000 BEOGRAD</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SINGAPORE</td>
<td>Singapore Computer Society</td>
<td>53/53A Neil Road, SINGAPORE 08891</td>
<td>Mr. Howie LAU</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Singapore</td>
<td>Chief Marketing Officer</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Tel. +65 6226 2567</td>
<td>StarHub</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Fax +65 6226 2569</td>
<td>67 Ubi Avenue 1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>email: <a href="mailto:scs.secretariat@scs.org.sg">scs.secretariat@scs.org.sg</a></td>
<td>#05-01 StarHub Green</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>URL: <a href="http://www.scs.org.sg">http://www.scs.org.sg</a></td>
<td>SINGAPORE 408942</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Tel. +65 6226 2567</td>
<td>Singapore</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Fax +65 6226 2569</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SLOVAKIA</td>
<td>Slovak Society for Computer Science</td>
<td>FMFI UK, Mlynska dolina, SK-842 48 BRATISLAVA</td>
<td>Dr. Igor PRIVARA</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Slovakia</td>
<td>Slovak Society for Computer Science</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Tel. +421 2 65426635</td>
<td>FMFI UK, Mlynska dolina</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Fax +421 2 65427041</td>
<td>SK-842 48 BRATISLAVA</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>email: <a href="mailto:kancelaria@informatika.sk">kancelaria@informatika.sk</a></td>
<td>Slovakia</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>URL: <a href="http://www.informatika.sk">http://www.informatika.sk</a></td>
<td>email: <a href="mailto:igor.privara@gmail.com">igor.privara@gmail.com</a></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SLOVENIA</td>
<td>Slovenian Society INFORMATIKA</td>
<td>Litostrojska cesta 54, SI-1000 LJUBLJANA</td>
<td>Mr. Niko SCHLAMBERGER</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Slovenia</td>
<td>President</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Tel. +386 41 735 054</td>
<td>Slovenian Society INFORMATIKA</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Fax +386 1 2415 344</td>
<td>Litostrojska cesta 54</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>email: <a href="mailto:info@drustvo-informatika.si">info@drustvo-informatika.si</a></td>
<td>SI-1000 LJUBLJANA</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>URL: <a href="http://www.drustvo-informatika.si">http://www.drustvo-informatika.si</a></td>
<td>Slovenia</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Tel. +386 41 735 054</td>
<td>Tel. +386 41 735 054</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Fax +386 1 2415 344</td>
<td>Fax +386 1 2415 344</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SOUTH AFRICA</td>
<td>Institute of Information Technology Professionals</td>
<td>P.O. Box 1714, Halfway House, ZA-1685 GAUTENG</td>
<td>Prof. Rosouw von SOLMS</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>South Africa</td>
<td>Office R102</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Tel. +27 11 315 1319</td>
<td>School of ICT</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Fax +27 11 315 2276</td>
<td>P.O. Box 77000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>email: <a href="mailto:ceeo@iitpsa.org.za">ceeo@iitpsa.org.za</a></td>
<td>NMMU 6031</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Tel. +27 41 504 3604</td>
<td>PORT ELIZABETH</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Fax +27 41 504 9604</td>
<td>South Africa</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>email: <a href="mailto:rossouw@nmmu.ac.za">rossouw@nmmu.ac.za</a></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Country</td>
<td>Organization</td>
<td>Address</td>
<td>Phone</td>
<td>Fax</td>
<td>Email</td>
<td>URL</td>
</tr>
<tr>
<td>---------</td>
<td>--------------</td>
<td>---------</td>
<td>-------</td>
<td>-----</td>
<td>-------</td>
<td>-----</td>
</tr>
<tr>
<td>SPAIN</td>
<td>ATI Asociación de Técnicos de Informática</td>
<td>Via Laietana, 46, ES-08003 BARCELONA Spain</td>
<td>Tel. +34 93 412 52 35</td>
<td>Fax +34 93 412 77 13</td>
<td><a href="mailto:secregen@ati.es">secregen@ati.es</a></td>
<td><a href="http://www.ati.es">http://www.ati.es</a></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SRI LANKA</td>
<td>The Computer Society of Sri Lanka CSSL Professional Centre</td>
<td>275/75 Stanley Wijesundera Mawatha COLOMBO 7, Sri Lanka</td>
<td>Tel. +94 11 471 3336</td>
<td>Fax +94 11 250 8009</td>
<td><a href="mailto:info@cssl.lk">info@cssl.lk</a></td>
<td><a href="http://www.cssl.lk">http://www.cssl.lk</a></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SWEDEN</td>
<td>Dataföreningen i Sverige</td>
<td>Kungsbro Strand 29 SE-112 26 STOCKHOLM Sweden</td>
<td>Tel. +46 8 587 434 00</td>
<td>Fax +46 8 587 434 60</td>
<td><a href="mailto:info@dfs.se">info@dfs.se</a></td>
<td><a href="http://www.dfs.se">http://www.dfs.se</a></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SWITZERLAND</td>
<td>Schweizer Informatik Gesellschaft SI</td>
<td>Effingerstrasse 19 CH-3008 BERN Switzerland</td>
<td>Tel. +41 32 512 23 33</td>
<td>email: <a href="mailto:admin@s-i.ch">admin@s-i.ch</a></td>
<td></td>
<td><a href="http://www.s-i.ch">http://www.s-i.ch</a></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TUNISIA</td>
<td>Ecole Superieure des Communications De Tunis (Sup’Com)</td>
<td>Cite technologique des Communications El Ghazala, 2088 Ariana Tunisie</td>
<td>Tel. +216 71 857 000</td>
<td>Fax +216 71 856 829</td>
<td><a href="mailto:adel.ghazel@supcom.rnu.tn">adel.ghazel@supcom.rnu.tn</a></td>
<td><a href="http://www.supcom.mincom.tn">http://www.supcom.mincom.tn</a></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>UKRAINE</td>
<td>Ukrainian Federation of Informatics (UFI)</td>
<td>031514 Smilyanska UA-03151 KYIV Ukraine</td>
<td>Tel. +380 44 246 2784</td>
<td>Fax +380 44 246 2784</td>
<td><a href="mailto:inf@ufi.org.ua">inf@ufi.org.ua</a></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---

**URL:** http://www.iitpsa.org.za

**Email:** rossouw.vonsolms@nmmu.ac.za

**Prof. Carlos JUIZ**

University of the Balearic Islands

Department of Mathematics and Computer Science

Ctra. Valldemossa km 7,5

Anselm Turmeda building

ES-07122 PALMA DE MALLORCA Spain

Tel. +34 97 1173427

e-mail: cjuiz@uib.es

---

**Prof. Dr. Mourad ZGHAL**

Associate Professor

Ecole Supérieure des Communications de Tunis (Sup’Com) Université de Carthage Cité Technologique des Communications El Ghazala, 2083 Ariana, Tunisie

Tel. (+216) 71857000 (#1025)

Fax: (+216) 71856829

E-mail: mourad.zghal@supcom.rnu.tn

Web: www.supcom.mincom.tn

---

**Prof. Dr. Igor GREBENNIK**

Kharkiv National University of Radio Electronics Faculty of Computer Science

14, Lenin Ave UA-61166 KHARKIV Ukraine

Tel. +380 67 922 6136

Fax +380 57 702 1017

E-mail: igorgrebennik@gmail.com
<table>
<thead>
<tr>
<th>UNITED ARABIAN EMIRATES</th>
<th>Dr. Mansoor AL AWAR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hamdan Bin Mohammed Smart University</td>
<td>Chancellor</td>
</tr>
<tr>
<td>c/o Mrs. Serine El Salhat</td>
<td>Hamdan Bin Mohammed Smart University</td>
</tr>
<tr>
<td>Director of Chancellor’s Office &amp; International Cooperation</td>
<td>P.O. Box 71400</td>
</tr>
<tr>
<td>P.O. Box 71400</td>
<td>DUBAI</td>
</tr>
<tr>
<td>DUBAI, United Arab Emirates</td>
<td>United Arab Emirates</td>
</tr>
<tr>
<td>Tel. +971 4 424 1105</td>
<td>Tel. +971 4 424 1100</td>
</tr>
<tr>
<td>Fax +971 4 439 3905</td>
<td>Fax +971 4 439 3900</td>
</tr>
<tr>
<td>email: <a href="mailto:s.elsalhat@hbmsu.ac.ae">s.elsalhat@hbmsu.ac.ae</a></td>
<td>email: <a href="mailto:m.alteneiji@hbmsu.ac.ae">m.alteneiji@hbmsu.ac.ae</a></td>
</tr>
<tr>
<td>URL: <a href="http://www.hbmsu.ac.ae">http://www.hbmsu.ac.ae</a></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>UNITED KINGDOM</td>
<td>Prof. Andrew McGETTRICK</td>
</tr>
<tr>
<td>BCS The Chartered Institute for IT</td>
<td>University of Strathclyde</td>
</tr>
<tr>
<td>c/o Ms. Dianne Geldenhuis</td>
<td>Department of Computer and Information Sciences</td>
</tr>
<tr>
<td>1st Floor, Block D</td>
<td>Livingstone Tower</td>
</tr>
<tr>
<td>North Star House, North Star Avenue</td>
<td>26 Richmond Street</td>
</tr>
<tr>
<td>SWINDON SN2 1FA, United Kingdom</td>
<td>GLASGOW G1 1XH</td>
</tr>
<tr>
<td>Tel. +44 1793 417 750</td>
<td>United Kingdom</td>
</tr>
<tr>
<td>Fax +44 1793 417 444</td>
<td>Tel. +44 141 548 3589</td>
</tr>
<tr>
<td>email: <a href="mailto:dianne.geldenhuis@hq.bcs.org.uk">dianne.geldenhuis@hq.bcs.org.uk</a></td>
<td>email: <a href="mailto:andrew.mcgettrick@cis.strath.ac.uk">andrew.mcgettrick@cis.strath.ac.uk</a></td>
</tr>
<tr>
<td>URL: <a href="http://www.bcs.org">http://www.bcs.org</a></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>ZIMBABWE</td>
<td>Mr. Lawrence GUDZA</td>
</tr>
<tr>
<td>Computer Society of Zimbabwe</td>
<td>10 Croborough Road</td>
</tr>
<tr>
<td>P.O. Box CY 164</td>
<td>Mt. Pleasant</td>
</tr>
<tr>
<td>Causeway</td>
<td>HARARE</td>
</tr>
<tr>
<td>HARARE, Zimbabwe</td>
<td>Zimbabwe</td>
</tr>
<tr>
<td>Tel. +263 4 250 489</td>
<td>email: <a href="mailto:ldgudza@gmail.com">ldgudza@gmail.com</a></td>
</tr>
<tr>
<td>Fax +263 4 708 861</td>
<td></td>
</tr>
<tr>
<td>e-mail: <a href="mailto:info@csz.org.zw">info@csz.org.zw</a></td>
<td></td>
</tr>
<tr>
<td>URL: <a href="http://www.csz.org.zw">http://www.csz.org.zw</a></td>
<td></td>
</tr>
</tbody>
</table>

**Members at Large**

<table>
<thead>
<tr>
<th>ACM</th>
<th>Dr. Gerrit van der VEER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Association for Computing Machinery</td>
<td>Voorhof 33</td>
</tr>
<tr>
<td>c/o Ms. Patricia Ryan, COO</td>
<td>NL-8212 CP LEYESTAD</td>
</tr>
<tr>
<td>2 Penn Plaza, Suite 701</td>
<td>The Netherlands</td>
</tr>
<tr>
<td>NEW YORK, NY 10121-0701, USA</td>
<td>Tel. +31 20 598 7764</td>
</tr>
<tr>
<td>Tel. +1 212 626 0515</td>
<td>email: <a href="mailto:gerrit@acm.org">gerrit@acm.org</a></td>
</tr>
<tr>
<td>Fax +1 212 944 1318</td>
<td></td>
</tr>
<tr>
<td>email: <a href="mailto:ryanp@hq.acm.org">ryanp@hq.acm.org</a></td>
<td></td>
</tr>
<tr>
<td>URL: <a href="http://www.acm.org">http://www.acm.org</a></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CLEI</th>
<th>Prof. Héctor CANCELA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Centro Latinoamericano de Estudios Informatica</td>
<td>Instituto de Computación</td>
</tr>
<tr>
<td>Prof. Héctor Cancela</td>
<td>Facultad de Ingeniería</td>
</tr>
<tr>
<td>Dep.Ing. Electrica y Computadoras</td>
<td>Universidad de la República - Uruguay</td>
</tr>
<tr>
<td>Universidad Nacional del Sur</td>
<td>J. Herrera y Reissig 565</td>
</tr>
<tr>
<td>Avda. Alem 1253</td>
<td>UY-11300 MONTEVIDEO</td>
</tr>
<tr>
<td>AR-8000, BAHIA BLANCA, Argentina</td>
<td>Uruguay</td>
</tr>
<tr>
<td>Tel. +54 291 4595181</td>
<td>Tel. +598 2 7114244 ext. 1110</td>
</tr>
<tr>
<td>Fax +54 291 4595154</td>
<td>Fax +598 2 7110469</td>
</tr>
<tr>
<td>email: <a href="mailto:cancela@fing.edu.uy">cancela@fing.edu.uy</a></td>
<td>email: <a href="mailto:cancela@fing.edu.uy">cancela@fing.edu.uy</a></td>
</tr>
<tr>
<td>URL: <a href="http://www.clei.cl">http://www.clei.cl</a></td>
<td></td>
</tr>
</tbody>
</table>

16
### Ex-Officio Members

<table>
<thead>
<tr>
<th>Ex-Officio Members</th>
<th>Prof. Max A. <strong>Bramer</strong> (UK)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ms. Brenda <strong>AYNSLEY</strong> (AU)</td>
<td>IFIP Vice-President</td>
</tr>
<tr>
<td>ACS Media Centre</td>
<td>University of Portsmouth</td>
</tr>
<tr>
<td>PO Box 534 QVB</td>
<td>School of Computing</td>
</tr>
<tr>
<td>Sydney, NSW 1230</td>
<td>Buckingham Building</td>
</tr>
<tr>
<td>Australia</td>
<td>Lion Terrace</td>
</tr>
<tr>
<td>Tel. +61 29299 3666</td>
<td>Portsmouth, PO1 3HE</td>
</tr>
<tr>
<td>Fax +61 29299 3997</td>
<td>Hants, United Kingdom</td>
</tr>
<tr>
<td>email: <a href="mailto:brenda@internode.on.net">brenda@internode.on.net</a></td>
<td>Tel. +44 2392 846380</td>
</tr>
<tr>
<td></td>
<td>Fax +44 2392 846364</td>
</tr>
<tr>
<td></td>
<td>email: <a href="mailto:max.bramer@port.ac.uk">max.bramer@port.ac.uk</a></td>
</tr>
<tr>
<td></td>
<td><a href="mailto:max.bramer@googlemail.com">max.bramer@googlemail.com</a></td>
</tr>
<tr>
<td><strong>Prof. Michael G. HINCHEY</strong> (IE)</td>
<td><strong>Prof. Dr. Franz Josef Rammig</strong> (Germany)</td>
</tr>
<tr>
<td>IFIP Vice President</td>
<td>Centrum Nixdorf Institut</td>
</tr>
<tr>
<td>Co-Director</td>
<td>Universität Paderborn</td>
</tr>
<tr>
<td>Lero – The Irish Software</td>
<td>Fürstenallee 11</td>
</tr>
<tr>
<td>Eng. Research Centre</td>
<td>DE-33102 PADERBORN</td>
</tr>
<tr>
<td>University of Limerick</td>
<td>Germany</td>
</tr>
<tr>
<td>LIMERICK</td>
<td>Tel. +49 5251 60 6500</td>
</tr>
<tr>
<td>Ireland</td>
<td>Fax +49 5251 60 6502</td>
</tr>
<tr>
<td>Tel. +353 61 233607</td>
<td>email: <a href="mailto:franz@uni-paderborn.de">franz@uni-paderborn.de</a> <a href="mailto:franz@upb.de">franz@upb.de</a></td>
</tr>
<tr>
<td>Fax +353 61 213036</td>
<td><strong>Dr. Gabriela Marin Ra Ventos</strong> (Costa Rica)</td>
</tr>
<tr>
<td>e-mail: <a href="mailto:mike.hinchey@lero.ie">mike.hinchey@lero.ie</a></td>
<td>Centro Centro Latinoamericano de Estudios en Informática (CLEI)</td>
</tr>
<tr>
<td></td>
<td>Directora CITIC</td>
</tr>
<tr>
<td></td>
<td>Universidad de Costa Rica</td>
</tr>
<tr>
<td></td>
<td>Sede &quot;Rodrigo Facio Brenes&quot; Montes de Oca CR-2060 SAN JOSE</td>
</tr>
<tr>
<td></td>
<td>Costa Rica</td>
</tr>
<tr>
<td></td>
<td>Tel. +506 2511 8016</td>
</tr>
<tr>
<td></td>
<td>Fax +506 2224 8026</td>
</tr>
<tr>
<td></td>
<td>email: <a href="mailto:gabrielamarinraventos@gmail.com">gabrielamarinraventos@gmail.com</a></td>
</tr>
<tr>
<td><strong>Dr. Roger Johnson</strong> (UK)</td>
<td><strong>Prof. Tom Crick</strong> (UK)</td>
</tr>
<tr>
<td>9 Chipstead Park Close</td>
<td>InterYIT</td>
</tr>
<tr>
<td>SEVENOAKS, KENT TN13 2SJ</td>
<td>Cardiff Metropolitan University</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>Cardiff School of Management</td>
</tr>
<tr>
<td>Tel. +44 1732 453215</td>
<td>Llandaff Campus, Western Avenue</td>
</tr>
<tr>
<td>Fax +44 7947 676305</td>
<td>CARDIFF CF5 2YB</td>
</tr>
<tr>
<td>email: <a href="mailto:r.johnson@bcs.org.uk">r.johnson@bcs.org.uk</a></td>
<td>United Kingdom</td>
</tr>
<tr>
<td></td>
<td>Tel. +44 29 2041 7174</td>
</tr>
<tr>
<td></td>
<td>email: <a href="mailto:tcrick@cardiffmet.ac.uk">tcrick@cardiffmet.ac.uk</a></td>
</tr>
<tr>
<td>All Technical Committee Chairs</td>
<td></td>
</tr>
</tbody>
</table>

---

**Notes:**
- All phone numbers are local extensions.
- Email addresses are as of the last update.
## Associate Members

<table>
<thead>
<tr>
<th>Society</th>
<th>Representative</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CEPIS</strong>&lt;br&gt; Council of European Professional Informatics Societies&lt;br&gt;Avenue Roger Vandendriessche 18/9&lt;br&gt;BE-1150 BRUXELLES&lt;br&gt;Belgium&lt;br&gt;Tel. +32 2 772 1836&lt;br&gt;Fax +32 2 646 3032&lt;br&gt;e-mail: <a href="mailto:info@cepis.org">info@cepis.org</a>&lt;br&gt;URL: <a href="http://www.cepis.org">http://www.cepis.org</a></td>
<td>Mr. Declan <strong>BRADY</strong>&lt;br&gt;c/o The Irish Computer Society&lt;br&gt;87-89 Pembroke Road&lt;br&gt;Ballsbridge&lt;br&gt;DUBLIN 4&lt;br&gt;Ireland&lt;br&gt;Tel. +353 1 644 7820&lt;br&gt;Fax +353 1 662 0224&lt;br&gt;email: <a href="mailto:ifip@ics.ie">ifip@ics.ie</a>&lt;br&gt;<a href="mailto:bradydt@eircom.net">bradydt@eircom.net</a></td>
</tr>
<tr>
<td><strong>IMIA</strong>&lt;br&gt; International Medical Informatics Association&lt;br&gt;81 Boulevard de la Cluse&lt;br&gt;CH-1205 GENEVA&lt;br&gt;Switzerland&lt;br&gt;Tel. +41 22 372 7249&lt;br&gt;e-mail: <a href="mailto:imia@imia-services.org">imia@imia-services.org</a>&lt;br&gt;URL: <a href="http://www.imia.org">http://www.imia.org</a></td>
<td>Prof. Hiroshi <strong>TAKEDA</strong>&lt;br&gt;Osaka University Hospital&lt;br&gt;Graduate School of Health Care Sciences&lt;br&gt;Jikei Institute&lt;br&gt;1-2-8 Miyahara, Yodogawa-ku&lt;br&gt;OSAKA 532-0003&lt;br&gt;Japan&lt;br&gt;e-mail: <a href="mailto:takeda@hp-info.med.osaka-u.ac.jp">takeda@hp-info.med.osaka-u.ac.jp</a></td>
</tr>
<tr>
<td><strong>SEARCC</strong>&lt;br&gt;South East Asia Regional Computer Confederation&lt;br&gt;SEARCC Secretariat c/o Australian Computer Society&lt;br&gt;PO Box Q534&lt;br&gt;Queen Victoria Building&lt;br&gt;SYDNEY NSW 1230, Australia&lt;br&gt;Tel. +61 414 672 161&lt;br&gt;Fax +61 2 9299 3997&lt;br&gt;e-mail: <a href="mailto:sg@searcc.org">sg@searcc.org</a>&lt;br&gt;URL: <a href="http://www.searcc.org">http://www.searcc.org</a></td>
<td>Mr. Yohan <strong>RAMASUNDARA</strong>&lt;br&gt;SEARCC Secretariat&lt;br&gt;c/o Australian Computer Society&lt;br&gt;PO Box Q534&lt;br&gt;Queen Victoria Building&lt;br&gt;SYDNEY NSW 1230&lt;br&gt;Australia&lt;br&gt;Tel. +61 414 672 161&lt;br&gt;Fax +61 2 9299 3997&lt;br&gt;email: <a href="mailto:sg@searcc.org">sg@searcc.org</a></td>
</tr>
<tr>
<td><strong>VLDB</strong>&lt;br&gt;The Very Large Data Bases Endowment&lt;br&gt;c/o Prof. Renee Miller&lt;br&gt;Dept. of Computer Science&lt;br&gt;University of Toronto&lt;br&gt;6 King's College Rd., rm. 283&lt;br&gt;TORONTO, ON M5S 1A4, Canada&lt;br&gt;e-mail: <a href="mailto:miller@cs.toronto.edu">miller@cs.toronto.edu</a>&lt;br&gt;URL: <a href="http://www.vldb.org">http://www.vldb.org</a></td>
<td>Prof. Renee <strong>MILLER</strong>&lt;br&gt;University of Toronto&lt;br&gt;Dept.of Computer Science&lt;br&gt;6 King's College Rd.&lt;br&gt;TORONTO, ON M5S 1A4&lt;br&gt;Canada&lt;br&gt;e-mail: <a href="mailto:miller@cs.toronto.edu">miller@cs.toronto.edu</a></td>
</tr>
</tbody>
</table>
TC 1 - Foundations of Computer Science

est. 1989 as SG14 / approved in 1996 as TC 1
URL: http://www.ifip-tc1.org

Chair
Prof. Jacques SAKAROVITCH*, FR
LTCI, CNRS / Télécom ParisTech
Département Informatique et Réseaux
46, rue Barrault
FR-75013 PARIS Cedex 13
France
Tel. +33 1 45 81 80 60
Fax +33 1 45 81 31 19
e-mail: sakarovitch@enst.fr

ex-officio members: WG Chairs
*) TC1 representative from an IFIP Member Society
**) Member recommended by TC1
***) Distinguished Fellow member

WG 1.1 - Continuous Algorithms and Complexity

est. 1992
dissolved 2016
WG 1.2 - Descriptional Complexity
est. 1992
URL: http://www.informatik.uni-giessen.de/ifipwg1.2/

Chair
Prof. Giovanni PIGHIZZINI
Università degli Studi di Milano
Dipartimento di Informatica
Via Comelico, 39
IT-20135 MILANO
Italy
Tel. +39 02 5031 6303
Fax +39 02 5031 6304
e-mail: pighizzini@di.unimi.it

Vice-Chair
Prof. Helmut JÜRGENSEN
University of Western Ontario
Dep. of Computer Science
Middlesex College
LONDON, ON N6A 5B7
Canada
Tel. +1 519 661 3560
Fax +1 519 661 3515
e-mail: hjj@csd.uwo.ca

Secretary
Dr. Andreas MALCHER
Universität Giessen
Institut für Informatik
Arndtstr. 2
DE-35392 GIESEN
Germany
Tel. +49 641 99 32143
Fax +49 641 99 32149
e-mail: andreas.malcher@informatik.uni-giessen.de

CA Cezar Campeanu
CA Ming Li
CA Kai Salomaa
CA Jeffrey Shallit
CZ Alicia Kelemenova
DE Norbert Blum
DE Henning Bordihn
DE Jürgen Dassow
DE Markus Holzer
DE Günter Hotz
DE Juraj Hromkovic
DE Martin Kappes
DE Martin Kutrib
DE Frank Niessner
DE Heinz Schmitz
DE Uwe Schoening
DE Helmut Seidl
DE Wolfgang Thomas
DE Klaus Wagner

CA
CA
CA
CA
CZ
DE
DE
DE
DE
DE
DE
DE
DE
DE
DE
DE
DE

DE Defleif Wotschke
ES Carlos Martin-Vide
HU Erzsébet Csuha-Vargy
HU György Vaszi
IT Avraham Trahtman
IT Stefano Crespi Righetti
IT Carlo Mereghetti
IT Matteo Pradella
JP Kosaburo Hashiguchi
JP Akira Ito
JP Osamu Watanabe
NL Grzegorz Rozenberg
NL Paul Vitany
NZ Cristian Calude
PT Nelma Moreira
PT Rogério Reis
RO Victor Mitran
RO Gheorghe Paun
SK Viliam Geffert
US Eric Allender
US Charles H. Bennett

US Manuel Blum
US Karel Cuiñk
US Andrej Ehrenfeucht
US Peter Gacs
US Jonathan Goldstine
US Juris Hartmanis
US Steven Homer
US Harry Hunt
US Oscar Ibarra
US Neil Immerman
US Hing Leung
US Luc Longpre
US Albert R. Meyer
US Bala Ravikumar
US Walter Savitch
US Joel Seiferas
US Michael Sipser
US Richard E. Stearns
US Leslie G. Valiant

WG 1.3 - Foundations of Systems Specification
est. 1992
URL: http://ifipwg13.cs.ovgu.de/

Chair
Prof. Markus ROGGENBACH
University of Wales Swansea
Department of Computer Science
Singleton Park
SWANSEA SA2 8PP
United Kingdom
Tel. +44 1792 51-3578
e-mail: m.roggenbach@swan.ac.uk

Vice-Chair
Prof. Dr. Lutz SCHRÖDER
Friedrich-Alexander Universität
Erlangen-Nürnberg
Department of Computer Science
Martensstraße 3
DE-91058 ERLANGEN
Germany
Tel. +49 9131 85 64059
e-mail: lutz.schroeder@fau.de

US
US
US
US
US
US
US
US
US
US
US
US
US
US
US

DE
DE
DE
DE
DE
DE
DE
DE
DE
DE
DE
DE
DE
DE
DE
DE
WG 1.5 - Cellular Automata and Discrete Complex Systems

est. 1994, dissolved 2004, re-established 2008

URL: http://www.iec.hiroshima-u.ac.jp/ifip15

Chair
Dr. Pedro P.B. DE OLIVEIRA
Universidade Presbiteriana Mackenzie
Faculdade de Computação e Informática
Rua da Consolação 896
BR-01302-907 SÃO PAULO, SP Brazil
Tel. +55 12 98149 8758
e-mail: pedrob@mackenzie.br
URL: http://professor.mackenzie.br/pedrpb

Vice-Chair
Dr. Nazim FATÉS
Inria Nancy - Grand Est
615 rue du Jardin Botanique
FR-54 600 VILLERS-LES-NANCY
France
Tel: +33 3 54 95 85 16
e-mail: nazim.fates@loria.fr
URL: http://www.loria.fr/~fates

Secretary
Dr. Katsunobu IMAI
Hiroshima University Graduate School of Engineering
1-4-1, Kagamiyama, 739-8527, Japan
Tel. +81 824 22 7195
Fax +81 824 22 7195
e-mail: imai@hiroshima-u.ac.jp
URL: http://www.iec.hiroshima-u.ac.jp/~imai

BE Andre Barbe
FI Ville Salo
CA Henry Fuks
FR Julien Cerville
CA Anna Lawniczak
FR Marianne Delorme
CA Marcus Pivato
FR Bruno Durand
CA Burton Voorhees
FR Enrico Formenti
CA Bastien Chopard
FR Pierre Guillon
CA Matthew Cook
FR Gregory Lafitte
CL Eric Goles
FR Maurice Margenstern
CL Alejandro Maass
FR Jacques Mazoyer
CL Andres Moreira
FR Nicolas Ollinger
CL Ivan Rapaport
FR Victor Poupet
CZ Petr Kurka
FR Gaëtan Richard
DE Andreas Deutsch
FR Veronique Terrier
DE Martin Kutrib
FR Guillaume Thèyssey
DE Andreas Malcher
FR Laurent Vuillon
DE Guencho Skordev
GB Andy Adamatzky
DE Thomas Worsch
IT Stefania Bandini
FI Jarkko Kari
IT Gianpiero Cattaneo
*

*) member emeritus
WG 1.6 - Term Rewriting
est. 1998
URL: http://cbruibk.ac.at/ifip-wg1.6/

Chair
Prof. Georg MOSER
University of Innsbruck
Institute of Computer Science
Technikerstrasse 21a
AT 6020 INNSBRUCK
Austria
Tel. +43 512 507 53213
e-mail: georg.moser@uibk.ac.at

Secretary
Dr. Ugo DAL LAGO
Università degli Studi di Bologna
Dipartimento di Informatica-
Scienza e Ingegneria
Mura Anteo Zamboni, 7
IT-40127 BOLOGNA
Italy
Tel. +39 05 1209 4991
Fax +39 05 1209 4510
e-mail: dallago@cs.unibo.it

AT Aart Middeldorp
DE Jürgen Avenhaus*
DE Franz Baader*
DE Jürgen Giesl
DE Klaus Madlener*
DE Tobias Nipkow*
DE Friedrich Otto
DE Manfred Schmidt-Schauss
DE Johannes Waldmann
DK Peter Schneider-Kamp
ES Salvador Lucas
ES Robert Nieuwenhuis
ES Albert Rubio
FR Siva Anantharaman
FR Hubert Comon*
FR Gilles Dowek
FR Gerard Huet*

*) Honorary member

AT Tetsuo Ida
DE Yoshitomo Toyama
DE Henk Barendregt*
NL Jan Willem Klop*
NL Vincent van Oostrom
NL Femke van Raamsdonk
DE Hans Zantema
DE Daniel J. Dougherty
US Deepak Kapur*
US Christopher Lynch
US Jose Meseguer
US David Plaisted
US Kristoffer Rose
US Aaron Stump
US Ashish Tiwari

---

WG 1.7 Theoretical Foundations of Security Analysis and Design
est. 1999
URL: http://www.dsi.unive.it/IFIPWG1_7/

Chair
Prof. Riccardo FOCARDI
Università Ca’ Foscari di Venezia
Dipartimento di Informatica
Via Torino 155
IT-30172 MESTRE
Italy
Tel. +39 041 2348438
Fax +39 041 2348419
e-mail: focardi@dsi.unive.it

Secretary
Prof. Luca VIGANÒ
Department of Informatics
King’s College London
Strand
LONDON WC2R 2LS
United Kingdom
Tel. +44 20 7848 2078
e-mail: luca.vigano@kcl.ac.uk

AU Carroll Morgan
BE Jean-Jacques Quisquater
CH David Basin
CN Li Gong
DE Dieter Gollmann
DE Jan Jürjens
DE Ralf Küsters
DE Matteo Maffei
DK Sebastian A. Mödersheim
ES Gilles Barthe

FR Florent Jacquemard
FR Jean-Pierre Jouannaud*
FR Delia Kesner
FR Claude Kirchner
FR Helene Kirchner
FR Pierre Lescanne*
FR Michael Rusinowitch
FR Ralf Treinen
FR Laurent Vigneron
GB Maribel Fernández
IL Nachum Dershowitz
IT Corrado Bohme*
IT Maria Paola Bonacina
IT Ugo Montanari*
JP Takahto Aoto
JP Nao Hirokawa

FR Gilles Dowek
GB Mark Ryan
GB Steve Schneider
JP Yves Lafont
JP Tetsuo Ida
JP Yoshitomo Toyama
NL Henk Barendregt*
NL Jan Willem Klop*
NL Vincent van Oostrom
NL Femke van Raamsdonk
DE Hans Zantema
DE Daniel J. Dougherty
US Deepak Kapur*
US Christopher Lynch
US Jose Meseguer
US David Plaisted
US Kristoffer Rose
US Aaron Stump
US Ashish Tiwari

AU Peter Ryan
BE Sandro Etalle
CH Martin Abadi
DE Raphael Yahalom
US Joshua Guttman
US Catherine Meadows
US John C. Mitchell
US Geoffrey Smith
US Paul Syverson

AU Peter Ryan
BE Sandro Etalle
CH Martin Abadi
DE Raphael Yahalom
US Joshua Guttman
US Catherine Meadows
US John C. Mitchell
US Geoffrey Smith
US Paul Syverson
### WG 1.8 – Concurrency Theory

**Chair**
Dr. Ilaria CASTELLANI  
Institut National de Recherche en Informatique et Automatique (INRIA)  
2004, route des Lucioles,  
BP 93,  
FR-06902 SOPHIA ANTIPOLIS  
France  
e-mail: ilaria.castellani@inria.fr

**Secretary**
Prof. Mohammad Reza MOUSAVI  
Halmstad University School of IDE Center for Research on Embedded Systems (CERES)  
Box 823  
SE-30118 HALMSTAD  
Sweden  
e-mail: m.r.mousavi@hh.se

<table>
<thead>
<tr>
<th>Country</th>
<th>Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>AR</td>
<td>Pedro D’Argenio</td>
</tr>
<tr>
<td>AT</td>
<td>Ana Sokolova</td>
</tr>
<tr>
<td>AU</td>
<td>Rob van Glabbeek</td>
</tr>
<tr>
<td>CA</td>
<td>Prakash Panangaden</td>
</tr>
<tr>
<td>CN</td>
<td>Yuxi Fu</td>
</tr>
<tr>
<td>CN</td>
<td>Huimin Lin</td>
</tr>
<tr>
<td>CN</td>
<td>Xinlin Liu</td>
</tr>
<tr>
<td>CZ</td>
<td>Antonin Kucera</td>
</tr>
<tr>
<td>DE</td>
<td>Javier Esparza</td>
</tr>
<tr>
<td>DE</td>
<td>Ursula Goltz</td>
</tr>
<tr>
<td>DE</td>
<td>Holger Hermanns</td>
</tr>
<tr>
<td>DE</td>
<td>Joost-Pieter Katoen</td>
</tr>
<tr>
<td>DE</td>
<td>Uwe Nestmann</td>
</tr>
<tr>
<td>DE</td>
<td>Walter Vogler</td>
</tr>
<tr>
<td>DK</td>
<td>Kim G. Larsen</td>
</tr>
<tr>
<td>ES</td>
<td>David de Frutos Escrig</td>
</tr>
<tr>
<td>FR</td>
<td>Roberto Amadio</td>
</tr>
<tr>
<td>FR</td>
<td>Patricia Bouyer-Decitre</td>
</tr>
<tr>
<td>FR</td>
<td>Vincent Danos</td>
</tr>
<tr>
<td>FR</td>
<td>Hubert Garavel</td>
</tr>
<tr>
<td>FR</td>
<td>Paul Gastin</td>
</tr>
<tr>
<td>FR</td>
<td>Catuscia Palamidessi</td>
</tr>
<tr>
<td>GB</td>
<td>Luca Cardelli</td>
</tr>
<tr>
<td>GB</td>
<td>Marta Kwiatkowska</td>
</tr>
<tr>
<td>GB</td>
<td>Bill Roscoe</td>
</tr>
<tr>
<td>GB</td>
<td>Steve Schneider</td>
</tr>
<tr>
<td>GB</td>
<td>Alexandra Silva</td>
</tr>
<tr>
<td>GB</td>
<td>Colin Stirling</td>
</tr>
<tr>
<td>GB</td>
<td>Irek Ulidowski</td>
</tr>
<tr>
<td>GB</td>
<td>Nobuko Yoshida</td>
</tr>
<tr>
<td>IL</td>
<td>Orna Kupferman</td>
</tr>
<tr>
<td>IN</td>
<td>Madhavan Mukund</td>
</tr>
<tr>
<td>IS</td>
<td>Luca Aceto</td>
</tr>
<tr>
<td>IT</td>
<td>Michele Boreale</td>
</tr>
<tr>
<td>IT</td>
<td>Flavio Corradini</td>
</tr>
<tr>
<td>IT</td>
<td>Silvia Crafa</td>
</tr>
<tr>
<td>IT</td>
<td>Rocco De Nicola</td>
</tr>
<tr>
<td>IT</td>
<td>Anna Labella</td>
</tr>
<tr>
<td>IT</td>
<td>Cosimo Laneve</td>
</tr>
<tr>
<td>IT</td>
<td>Ugo Montanari</td>
</tr>
<tr>
<td>IT</td>
<td>Corrado Priami</td>
</tr>
<tr>
<td>IT</td>
<td>Davide Sangiorgi</td>
</tr>
<tr>
<td>JP</td>
<td>Naoki Kobayashi</td>
</tr>
<tr>
<td>NL</td>
<td>Jos Baeten</td>
</tr>
<tr>
<td>NL</td>
<td>Wan Fokkink</td>
</tr>
<tr>
<td>NL</td>
<td>Bas Luttik</td>
</tr>
<tr>
<td>NL</td>
<td>Alban Ponse</td>
</tr>
<tr>
<td>PT</td>
<td>Vasco Vasconcelos</td>
</tr>
<tr>
<td>US</td>
<td>Luca de Alfaro</td>
</tr>
<tr>
<td>US</td>
<td>Scott Smolka</td>
</tr>
<tr>
<td>US</td>
<td>Moshe Y. Vardi</td>
</tr>
</tbody>
</table>

### WG 1.9/2.15 - Verified Software

**Chair**
Dr. Jean-Christophe Fillatre  
Université Paris-Sud  
LRI – bâtiment 650  
FR-91405 ORSAY Cedex  
France  
Tel. +33 1 69 15 70 48  
Fax +33 1 69 15 65 79  
e-mail: jean-christophe.fillatre@lri.fr

**Secretary**
Dr. Natarajan SHANKAR  
SRI International  
333 Ravenswood Ave.  
MENLO PARK, CA 94025-3493  
USA  
Tel. +1 415 859 5272  
e-mail: shankar@csl.sri.com

<table>
<thead>
<tr>
<th>Country</th>
<th>Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>BE</td>
<td>Bart Jacobs</td>
</tr>
<tr>
<td>CH</td>
<td>Peter Mueller</td>
</tr>
<tr>
<td>DE</td>
<td>Tiziana Margaria</td>
</tr>
<tr>
<td>DE</td>
<td>Andreas Podelski</td>
</tr>
<tr>
<td>DE</td>
<td>Andrey Rybalchenko</td>
</tr>
<tr>
<td>DK</td>
<td>Joseph Kiniry</td>
</tr>
<tr>
<td>FR</td>
<td>Sandrine Blazy</td>
</tr>
<tr>
<td>GB</td>
<td>Andrew Ireland</td>
</tr>
<tr>
<td>GB</td>
<td>Cliff Jones</td>
</tr>
<tr>
<td>GB</td>
<td>Matthew Parkinson</td>
</tr>
<tr>
<td>GB</td>
<td>Jim Woodcock</td>
</tr>
<tr>
<td>US</td>
<td>Ernie Cohen</td>
</tr>
<tr>
<td>US</td>
<td>Klaus Havelund</td>
</tr>
<tr>
<td>US</td>
<td>Gary T. Leavens</td>
</tr>
<tr>
<td>US</td>
<td>Pete Manolios</td>
</tr>
<tr>
<td>US</td>
<td>Jayadev Misra</td>
</tr>
<tr>
<td>US</td>
<td>Shaz Quadeer</td>
</tr>
</tbody>
</table>
WG 1.10 – String Algorithmics & Applications
est. 2015

**Chair**
Prof. Costas Iliopoulos
University of London
Kings's College London
Dept. of Computer Science
The Strand,
LONDON WC2R 2LS
United Kingdom
Tel. +44 20 7848 2809
Fax +44 870 131 3372
e-mail: costas.iliopoulos@kcl.ac.uk

**Secretary**
Prof. William F. Smyth
McMaster University
Department of Computer Science & Systems, ITB 130
1280 Main Street West
HAMILTON, ON L8S4K1
Canada
Tel. +1 905 525 9140
Fax +1 905 524 0340
e-mail: smyth@mcmaster.ca

<table>
<thead>
<tr>
<th>Country</th>
<th>Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>AU</td>
<td>Alistair Moffat</td>
</tr>
<tr>
<td>BD</td>
<td>M. Sohel Rahman</td>
</tr>
<tr>
<td>CA</td>
<td>Lucian Iliopoulos</td>
</tr>
<tr>
<td>CL</td>
<td>Gonzalo Navarro</td>
</tr>
<tr>
<td>CZ</td>
<td>Jan Holub</td>
</tr>
<tr>
<td>FI</td>
<td>Juha Karkkainen</td>
</tr>
<tr>
<td>FI</td>
<td>Vel Mäkinen</td>
</tr>
<tr>
<td>FI</td>
<td>Simon J. Puglisi</td>
</tr>
<tr>
<td>FI</td>
<td>Esko Ukkonen</td>
</tr>
<tr>
<td>FR</td>
<td>Marie-Pierre Beal</td>
</tr>
<tr>
<td>FR</td>
<td>Gregory Kucherov</td>
</tr>
<tr>
<td>FR</td>
<td>Thierry Lecroq</td>
</tr>
<tr>
<td>FR</td>
<td>Laurent Mouchard</td>
</tr>
<tr>
<td>GB</td>
<td>Maxime Crochemore</td>
</tr>
<tr>
<td>GB</td>
<td>Solon P. Pissis</td>
</tr>
<tr>
<td>GB</td>
<td>Rajeev Raman</td>
</tr>
<tr>
<td>IL</td>
<td>Amihood Amir</td>
</tr>
<tr>
<td>IL</td>
<td>Gad M. Landau</td>
</tr>
<tr>
<td>IL</td>
<td>Moshe Lewenstein</td>
</tr>
<tr>
<td>IT</td>
<td>Alberto Apostolico</td>
</tr>
<tr>
<td>IT</td>
<td>Roberto Grossi</td>
</tr>
<tr>
<td>JP</td>
<td>Hideo Bannai</td>
</tr>
<tr>
<td>KR</td>
<td>Inbok Lee</td>
</tr>
<tr>
<td>KR</td>
<td>Kunsoo Park</td>
</tr>
<tr>
<td>PL</td>
<td>Wojciech Rytter</td>
</tr>
<tr>
<td>US</td>
<td>Stefano Lonardi</td>
</tr>
<tr>
<td>US</td>
<td>Muthu Muthukrishnan</td>
</tr>
<tr>
<td>ZA</td>
<td>Bruce Watson</td>
</tr>
<tr>
<td>GB</td>
<td>Gregory Kucherov</td>
</tr>
<tr>
<td>FR</td>
<td>Thierry Lecroq</td>
</tr>
<tr>
<td>FR</td>
<td>Laurent Mouchard</td>
</tr>
<tr>
<td>GB</td>
<td>Maxime Crochemore</td>
</tr>
<tr>
<td>GB</td>
<td>Solon P. Pissis</td>
</tr>
<tr>
<td>GB</td>
<td>Rajeev Raman</td>
</tr>
<tr>
<td>IL</td>
<td>Amihood Amir</td>
</tr>
<tr>
<td>IL</td>
<td>Gad M. Landau</td>
</tr>
<tr>
<td>IL</td>
<td>Moshe Lewenstein</td>
</tr>
<tr>
<td>IT</td>
<td>Alberto Apostolico</td>
</tr>
<tr>
<td>IT</td>
<td>Roberto Grossi</td>
</tr>
<tr>
<td>JP</td>
<td>Hideo Bannai</td>
</tr>
<tr>
<td>KR</td>
<td>Inbok Lee</td>
</tr>
<tr>
<td>KR</td>
<td>Kunsoo Park</td>
</tr>
<tr>
<td>PL</td>
<td>Wojciech Rytter</td>
</tr>
<tr>
<td>US</td>
<td>Stefano Lonardi</td>
</tr>
<tr>
<td>US</td>
<td>Muthu Muthukrishnan</td>
</tr>
<tr>
<td>ZA</td>
<td>Bruce Watson</td>
</tr>
</tbody>
</table>
TC 2 - Software: Theory and Practice
est. 1962, revised 1982, 1990
URL: https://ifip-tc2.paluno.uni-due.de

Chair
Prof. Michael GOEDICKE, DE
paluno The Ruhr Institute for
Software Technology
University of Duisburg-Essen
Gerlingstrasse 16
DE-45127 ESSEN
Germany
Tel. +49 201 183 3481
Fax +49 201 183 4698
e-mail: michael.goedicke@paluno.uni-due.de

Vice-Chair
Prof. Jerzy NAWROCKI, PL
Poznan Univ. of Technology
Inst. of Computing Science
ul. Piotrowo 2
PL-60-965 POZNAN
Poland
Tel. +48 61 665 3482
Fax +48 61 877 1525
e-mail: jerzy.nawrocki@put.poznan.pl

Secretary
Dr. Julia LAWALL, FR
INRIA Paris-Rocquencourt
LIP6
Boîte courrier 169
4 place Jussieu
FR-75252 PARIS Cedex 05
France
Tel. +33 1 44 27 88 52
e-mail: julia.lawall@lip6.fr

ex-officio members: WG Chairs

WG 2.1 - Algorithmic Languages and Calculi
est. 1962, revised 1963, 1990, 1992
URL: http://www.ifipwg21.org

Chair
Prof. Caroll MORGAN
The University of New South
Wales
School of Computer Science and
Engineering
K17-201D
SYDNEY NSW 2052
Australia
Tel. +61 2 9385 5317 x 55317
Fax +61 2 9385 5995 x 55995
e-mail: carollm@cse.unsw.edu.au

Vice-Chair
Prof. Johan JEURING
Utrecht University
Department of Information and
Computing Sciences
Buys Ballot Laboratorium 571
P.O. Box 80.089
NL-3508 TB UTRECHT
The Netherlands
Tel. +31 30 2534115
Fax +31 30 2513791
e-mail: j.t.jeuring@uu.nl

Secretary
Prof. Dr. Ir. Tom SCHRIJVERS
KU Leuven
Department of Computer Science
Celestijnenlaan 200A
BE-3001 LEUVEN
Belgium
Tel. +32 16 327830
e-mail: tom.schrijvers@cs.kuleuven.be

AU Peter Höfner
CA Hendrik J. Boom
CA Jules Desharnais
DE Andres Löh
DE Bernhard Möller
DE Helmut Partsch
DE Peter Pepper
DE Janis Voigtländer
DK Fritz Henglein
EE Tammo Uustalu
GB Roland Backhouse

GB Jeremy Gibbons
GB Ralf Hinze
GB Graham Hutton
GB Cezar Ionescu
GB Jose Pedro Magelhaes
GB Conor McBride
IT Alberto Pettorossi
JP Zhenjiang Hu
JP Eiti Wada
KR Bruno Oliveira
NL Lambert Meertens

AU Doaitse Swierstra
CA Wouter Swierstra
CA Walter Guttmann
DE Jose Oliveira
DE Nils Anders Danielsson
DE Patrik Jansson
TW Shin-Cheng Mu
UY Alberto Parbo
US Andrew Black
US Ernie Cohen
US Yanhong A. Liu

AR Marcelo Frias
AT Stefan Billic
AT Robert Meersman
AU Paul Bailes
BG Sylvia Ilieva
BR Julio Leite
CH Pascal Felber
CZE Heman Astudillo
CZ Přemysl Brada
DE Manfred Paul
ES Antonio Vallecillo
FI Reima Suomi
FR Charles Consel
HU Miklos Biro
IN Pankaj Jalete
IT Paolo Ciancarini
JP Zhenjiang Hu
NL Johan Jeuring
NZ Elizabeth A. Kemp (SEARCC)
PT Fernando Brito e Abreu
RS Renad Stefanovic
SI Marko Bajec
SK Maria Bielikova
UA Nikolay Sidorov
US Will Tracz (ACM)
ZA Bruce Watson

NZ
PT
RS
SI
SK
UA
US
ZA
## WG 2.2 - Formal Description of Programming Concepts

**Chair**
Dr. Igor WALUKIEWICZ  
LaBRI  
Université Bordeaux-1  
351, Cours de la Libération  
FR-33405 TALENCE Cedex  
France  
Tel. +33 5 40 00 66 03  
Fax +33 5 40 00 66 69

**Vice-Chair**
Prof. Javier ESPARZA  
Technische Universität München  
Boltzmannstr. 3  
DE-85748 MÜNCHEN  
Germany  
Tel. +49 89 289 17204  
Fax +49 89 289 17207

**Secretary**
Prof. Dr. Markus MÜLLER-OLM  
Westfälische Wilhelms-Universität Münster  
Institut für Informatik  
Einsteinstr. 62  
DE-48149 MÜNSTER  
Germany  
Tel. +49 251 83 33765  
Fax +49 251 83 33755

<table>
<thead>
<tr>
<th>AR</th>
<th>Marcelo Frias</th>
</tr>
</thead>
<tbody>
<tr>
<td>CZ</td>
<td>Antonin Kucera</td>
</tr>
<tr>
<td>DE</td>
<td>Joost-Pieter Katoen</td>
</tr>
<tr>
<td>DE</td>
<td>Barbara Koenig</td>
</tr>
<tr>
<td>DE</td>
<td>Uwe Nestmann</td>
</tr>
<tr>
<td>DE</td>
<td>Ernst-Rüdiger Olderog</td>
</tr>
<tr>
<td>ES</td>
<td>Gilles Barthe</td>
</tr>
<tr>
<td>FR</td>
<td>Ahmed Bouajjani</td>
</tr>
<tr>
<td>FR</td>
<td>Stephan Merz</td>
</tr>
<tr>
<td>GB</td>
<td>Maciej Koutny</td>
</tr>
<tr>
<td>GB</td>
<td>Peter D. Mosses</td>
</tr>
<tr>
<td>GB</td>
<td>Pawel Sobocinski</td>
</tr>
<tr>
<td>IE</td>
<td>Matthew Hennessy</td>
</tr>
<tr>
<td>IT</td>
<td>Mariangiola Dezani-Ciancaglini</td>
</tr>
<tr>
<td>IT</td>
<td>Ugo Montanari</td>
</tr>
<tr>
<td>IT</td>
<td>Rocco De Nicola</td>
</tr>
<tr>
<td>IT</td>
<td>Davide Sangiorgi</td>
</tr>
<tr>
<td>JP</td>
<td>Naoki Kobayashi</td>
</tr>
<tr>
<td>NL</td>
<td>Frank S. de Boer</td>
</tr>
<tr>
<td>NL</td>
<td>Jan Rutten</td>
</tr>
<tr>
<td>NO</td>
<td>Einar Broch Johnsen</td>
</tr>
<tr>
<td>PL</td>
<td>Wojciech Penczek</td>
</tr>
<tr>
<td>PL</td>
<td>Andrzej Tarlecki</td>
</tr>
<tr>
<td>PT</td>
<td>Luis Caires</td>
</tr>
<tr>
<td>SE</td>
<td>K.V.S. Prasad</td>
</tr>
<tr>
<td>US</td>
<td>Radu Grosu</td>
</tr>
</tbody>
</table>

## WG 2.3 - Programming Methodology

**Chair**
Prof. Michael BUTLER  
University of Southampton  
School of Electronics & Computer Science  
Highfield  
SOUTHAMPTON SO17 1 BJ  
United Kingdom  
Tel. +44 23 8059 2435  
Fax +44 23 8059 3045  
e-mail: mjb@ecs.soton.ac.uk

**Vice Chair**
Dr. K. Rustan M. LEINO  
Microsoft Research  
One Microsoft Way  
REDMOND, WA 98052  
USA  
Tel. +1 425 707 8045  
Fax +1 425 936 7329  
e-mail: leino@microsoft.com

**Secretary**
Dr. Rajeev JOSHI  
NASA Jet Propulsion Laboratory  
(JPL) MS 301-237  
4800 Oak Grove Drive  
PASADENA, CA 91109  
USA  
Tel. +1 818 393 7301  
Fax +1 818 354 3000  
e-mail: rajeev.joshi@jpl.nasa.gov

<table>
<thead>
<tr>
<th>AU</th>
<th>Ian Hayes</th>
</tr>
</thead>
<tbody>
<tr>
<td>AU</td>
<td>Annabelle McIver</td>
</tr>
<tr>
<td>AU</td>
<td>Carroll C. Morgan</td>
</tr>
<tr>
<td>AU</td>
<td>Mark Utting</td>
</tr>
<tr>
<td>CA</td>
<td>Azadeh Farzan</td>
</tr>
<tr>
<td>CH</td>
<td>Bertrand Meyer</td>
</tr>
<tr>
<td>CH</td>
<td>Peter Mueller</td>
</tr>
<tr>
<td>DE</td>
<td>Manfred Broy</td>
</tr>
<tr>
<td>DE</td>
<td>Andreas Podelski</td>
</tr>
<tr>
<td>FR</td>
<td>Patrick Cousot</td>
</tr>
<tr>
<td>FI</td>
<td>Ralph-Johan Back</td>
</tr>
<tr>
<td>GB</td>
<td>C.A.R. Hoare</td>
</tr>
<tr>
<td>GB</td>
<td>Michael Jackson</td>
</tr>
<tr>
<td>GB</td>
<td>Cliff B. Jones</td>
</tr>
<tr>
<td>GB</td>
<td>Jim Woodcock</td>
</tr>
<tr>
<td>TR</td>
<td>Sertar Tasiran</td>
</tr>
<tr>
<td>US</td>
<td>Robert M. Balzer</td>
</tr>
<tr>
<td>US</td>
<td>Clark Barrett</td>
</tr>
<tr>
<td>US</td>
<td>Ernie Cohen</td>
</tr>
<tr>
<td>US</td>
<td>William R. Cook</td>
</tr>
<tr>
<td>US</td>
<td>John R. Harrison</td>
</tr>
<tr>
<td>US</td>
<td>Daniel Jackson</td>
</tr>
<tr>
<td>US</td>
<td>Shiriram Krishnamurthi</td>
</tr>
<tr>
<td>US</td>
<td>Gary T. Leavens</td>
</tr>
<tr>
<td>US</td>
<td>Jayadev Misra</td>
</tr>
<tr>
<td>US</td>
<td>Natarajan Shankar</td>
</tr>
<tr>
<td>US</td>
<td>Emina Torlak</td>
</tr>
<tr>
<td>US</td>
<td>Pamela Zave</td>
</tr>
</tbody>
</table>
WG 2.4 - Software Implementation Technology

URL: http://www.ifip.org/wg-2.4

Chair
Prof. Frank TIP
Samsung Research America
665 Clyde Avenue
MOUNTAIN VIEW, CA 94043
USA
e-mail: ftip@samsung.com

Vice Chair
Dr. Anders MÖLLER
Aarhus University
Dept. of Computer Science
IT-parken, Aabogade 34
DK-8200 AARHUS N
Denmark
Tel. +45 233 09994
e-mail: amoeller@cs.au.dk

Secretary
Prof. Welf LÖWE
Linnaeus University
Dept. of Computer Science
Vejdes Plats 7
SE-35195 VÄXJÖ
Sweden
Tel. +46 470 8495
e-mail: welf.lowe@lnu.se

AT Jens Knoop
AT Markus Schordan
CA R.Nigel Horspool
CA Ondrej Lhotak
CH Thomas Gschwind
DE Uwe Assmann
DE Gerhard Goos
DE Stefan Jähnichen
DE Uwe Kastens
DE Rudolf Landwehr
DE Erhard Pliedereeder
DE Arnd Poetzsch-Heffter
DE Ina Schaefer
DE Nikola Serbedzija
DE Andreas Zeller
DE Wolf Zimmermann
DK Christian Probst
FR Xavier Rival
GB Max Schaefer
GB Peter Welch
NL Jurgen Vinju
PL Jerzy R. Nawrocki
SE Peter Fritzson
US Judith Bishop
US David Bromman
US Satish Chandra
US Cliff Click
US Jeff Foster
US Michael Franz
US Philip Levy
US Todd Millstein
US C.Robert Morgan
US John R. Nestor
US Alessandro Orso
US Tucker Taft
US Emina Torlak
US William M. Waite
US Kurt C. Wallnau
ZA Willem Visser
ZA Bruce Watson

WG 2.5 - Numerical Software

est. 1974, revised 1991  Aims and Scopes
URL: https://wg25.taa.univie.ac.at/

Chair
Prof. Ronald COOLS
KU Leuven
Department of Computer Science
Celestijnenlaan 200 A
BE-3001 HEVERLEE
Belgium
Tel. +32 0 16 327562
Fax +32 0 16 327996
e-mail: ronald.cools@cs.kuleuven.be

Vice-Chair
Dr. W. Van SNYDER
NASA
Jet Propulsion Laboratory
4800 Oak Grove Drive
M/S 183-701
PASADENA, CA 91109-8099
U.S.A
Tel. +1 818 354 6271
Fax +1 818 393 5065
e-mail: van.snyder@jpl.nasa.gov

Secretary
Prof. Wayne ENRIGHT
Dept. of Computer Science
University of Toronto
TORONTO, ON M5S 3G4
Canada
Tel. +1 416 978 5474
Fax +1 416 978 1931
e-mail: enright@cs.utoronto.ca

AT Wilfried N. Gansterer
CA Paul Muir
CN Mo Mu
CN Wu Zhang
DE Ulrich Kulisch
DE Siegfried M. Rump
DE Wolfgang Walter
ES Amparo Gil
ES Javier Segura
GB Brian Ford
GB Tim Hopkins
GB Ian Reid
GB Jennifer Scott
JP Shigeo Kawata
JP Mitsuhisa Sato
NO Patrick Gaffney
NO Hans Petter Lantangen
SE Bo Einarsson
SE Michael Thuné
US Andrew Dienstfrey
US Craig Douglas
US William D. Gropp
US Richard J. Hanson
US Michael Heroux
US John R. Rice
US Brian T. Smith
US Ping Tak Peter Tang
US Mladen A. Vouk
WG 2.6 - Database

URL: http://www.ifip.org/wg-2.6

Chair
Dr. Paolo CERAVOLO  
Universita’ degli Studi di Milano  
Dipartimento di Informatica  
via Bramante 65  
IT-26013 CREMA  
Italy  
Tel. +39 02 503 30101  
Fax +39 02 503 30074  
e-mail: paolo.ceravolo@unimi.it

Vice-Chair
Dr. Philippe CUDRE-MAUROUX  
University of Fribourg  
Department of Informatics  
Bd de Perolles 90  
CH-1700 FRIBOURG  
Switzerland  
Tel. +41 26 300 8332  
e-mail: phil@exascale.info

AE Marcello Leida  
AT Robert Meersman  
CH Karl Aberer  
CH Paul Cotofrei  
DE Erich J. Neuhold  
DE Thomas Risse  
DE Kai-Uwe Sattler  
IL Avigdor Gal  
IT Ernesto Damiani  
NL Maurice van Keulen  
PS Mustafa Jarrar

WG 2.7/13.4 - User Interface Engineering

URL: http://www.ifip.org/wg-2.7

Chair
Prof. José Creissac CAMPOS  
Universidade do Minho  
Campus de Gualtar  
Departamento de Informática  
Escola de Engenharia  
PT-4710-057 BRAGA  
Portugal  
Tel. +351 253 60 4474  
Fax +351 253 60 4471  
e-mail: jose.campos@di.uminho.pt

Vice-Chair
Prof. Gaëlle CALVARY  
Laboratoire d'Informatique  
de Grenoble  
Campus de Grenoble  
Bâtiment B  
385 Rue de la Bibliothèque  
BP 53  
FR-38041 GRENOBLE Cedex 9  
France  
Tel. +33 4 7651 4854  
Fax +33 4 7663 5686  
e-mail: gaelle.calvary@imag.fr

Secretary
Prof. Judy BOWEN  
University of Waikato  
Computer Science Department  
Hillcrest Road  
HAMILTON 3240  
New Zealand  
Tel. +64 7 838 4547  
Fax +64 7 858 5095  
e-mail: jb Bowen@cs.waikato.ac.nz

BE Kris Luyten  
BR Simone Barbosa  
CA Nicholas Graham  
CA Greg Phillips  
CA Kevin Schneider  
DE Anke Dittmar  
DE Peter Forbrig  
DE Helmut G. Stiegler  
DE Claus Unger  
DE Jürgen Ziegler  
DK Morten Borup Harning  
FR Stéphane Chatty  
FR Joëlle Coutaz  
FR Emmanuel Dubois  
FR Sophie Dupuy-Chessa  
FR Laurence Negay  
FR Philippe Palanque  
FR Marco Windkler  
GB Ann Blandford  
GB Alan Dix  
GB Harold Thimbleby  
IE Gavin Doherty  
IT Fabio Paterno  
NL Gerrit van der Veer  
US Len Bass  
US Bonnie E. John  
US Rick Kazman
WG 2.8 - Functional Programming

est. 1987, revised 1991
URL: http://www.cs.ox.ac.uk/ralf.hinze/WG2.8

Chair
Prof. Kathleen FISHER
Tufts University
Computer Science Department
Halligan Hall
161 College Ave.
MEDFORD, MA 02155
USA
Tel. +1 617 627 3831
e-mail: kfisher@eecs.tufts.edu

Secretary
Prof. Dr. Ralf HINZE
University of Oxford
Department of Computer Science
Wolfson Building, Parks Road
OXFORD OX1 3QD
United Kingdom
Tel. +44 1865 610700
Fax +44 1865 283531
e-mail: ralf.hinze@cs.ox.ac.uk

AU Manuel M. T. Chakravarty
CH Martin Odersky
DE Derek Dreyer
DE Peter Thiemann
DK Olivier Danvy
DK Fritz Henglein
FR Xavier Leroy
FR Didier Remy
GB Simon Marlow
GB Conor McBride
GB Simon Peyton Jones
GB Colin Runciman
GB Don Syme
GB David A. Turner
GB Dimitrios Vytiniotis
GB Philip Wadler
JP Eijiro Sumii
NL Rinus Plasmeijer
SE Lennart Augustsson
SE Koen Lindström Claessen
SE John M. Hughes
SE Ulf Norell
SE Mary Sheeran
US Amal Ahmed
US Arvind
US Adam Chlipala
US Robert Cartwright
US Jack B. Dennis
US Conal Elliott
US Robby Findler
US Nate Foster
US Robert W. Harper
US Mark P. Jones
US John Launchbury
US Dan Licata
US David B. MacQueen
US Erik Meijer
US Greg Morrisett
US Rishiyr S. Nikhil
US Christopher Okasaki
US Benjamin Pierce
US Norman Ramsey
US John Reppy
US Olin Shivers
US Satnam Singh
US Joe Stoy
US Stephanie Weirich
US Steve Zdancewic

WG 2.9 - Software Requirements Engineering

est. 1993
URL: http://www.ifip.org/wg-2.9

Chair
Prof. Jane CLELAND-HUANG
DePaul University
School of Computer Science, Telecommunications and Information Systems
243 S. Wabash Avenue
CHICAGO, IL 60604
USA
Tel. +1 312 362 8863
e-mail: jhuang@cs.depaul.edu

Vice-Chair
Prof. Andrea ZISMAN
The Open University
Centre for Research in Computing
Walton Hall
MILTON KEYNES
Buckinghamshire MK7 6AA
United Kingdom
Tel. +44 1908 274066
e-mail: andrea.zisman@open.ac.uk

Secretary
Prof. Mats HEIMDAHL
University of Minnesota
Software Engineering Center, Twin Cities
4-192 EE/CSci Bldg.
200 Union Street S.E.
MINNEAPOLIS, MN 55455
USA
Tel. +1 612 625 2068
Fax +1 612 625 0572
e-mail: heimdahl@cs.umn.edu

AR Sebastian Uchitel
BE Axel van Lamsweerde
BR Julio Caesar S. Leite
CA Joanne Allee
CA Daniel M. Berry
CA Marsha Chechik
CA Daniela Damian
CA John Mylopoulos
DE Klaus Pohl
DE Anthony Finkelstein
GB Jeffrey Kramer
GB Anthony Finkelstein
GB Bashar Nuseibeh
IE Carlo Ghezzi
IT Carlo Ghezzi
US Travis Breaux
US Betty H.C. Cheng
US Robert Hall
US Jim Herbseb
US Sol J. Greenspan
US Robyn R. Lutz
US William Robinson
US Michael W. Whalen
WG 2.12/12.4 - Web Semantics

est. 2004, revised 2005
URL: http://www.ifip.org/wg-2.12

Chair
Prof. Elizabeth CHANG
The University of New South Wales, UNSW Canberra
The Australian Defence Force Academy
P.O. Box 7916
CANBERRA BC 2610
Australia
Tel. +61 2 626 88414
Fax +61 2 626 88450
e-mail: e.chang@adfa.edu.au

Vice-Chair
Prof. Ernesto DAMIANI
Università degli Studi di Milano
De帕rtamento di Tecnologie dell’Informazione
via Bremante, 65
IT-2603 CREMA
Italy
Tel. +39 03 738 98064
e-mail: edamiani@crema.it

Secretary
Dr. Omar HUSSAIN
The University of New South Wales, UNSW Canberra
The Australian Defence Force Academy
P.O. Box 7916
CANBERRA BC 2610
Australia
Tel. +61 2 626 88512
Fax +61 2 626 88450
e-mail: o.hussain@adfa.edu.au

AT Robert A. Meersman
AU Tharam Dillon
AU Zahir Tari
BE Pierre-Yves Schobbens
BE Peter Spyns
CA John Mylopoulos
CA Mihaela Uieru
CN Qing Li
CN Lizhu Zhou
CN Hai Zhuge
DE York Sure
DE Robert Tolkersdorf
ES Carles Sierra
FR Kokou Yetongnon
FR Mohand-Said Hacid
GB David Bell
GB Carole Goble
IE Manfred Hauswirth
IL Avigdor Gal
IT Aldo Gangemi
IT Nicola Guarino
KR Kyu-Young Whang
NL Feng Ling
NL Frank van Harmelen
NL Wil van der Aalst
PS Mustafa Jarrar
US Elisa Bertino
US Christoph Bussler
US Stefan Decker
US Usama Fayyad
US Jiawei Han
US Ling Liu
US Mukesh Mohania
US Masoud Nikravesh
US Amet Sheth
US Katsuyo Sycara
US Susan Urban
US Ramasamy Uthurusamy
US Lotfi Zadeh

---

WG 2.13 – Open Source Software

est. 2006
URL: http://www.ifip.org/wg-2.13

Chair
Prof. Tony WASSERMAN
Carnegie Mellon University
Silicon Valley
Building 23 (MS-11)
MOFFETT FIELD, CA 94035
USA
Tel. +1 650 335 2807
e-mail: tonyw@cmu.edu

Vice-Chair
Prof. Imed HAMMOUDA
Chalmers University of Technology
Software Engineering Division
Comp. Science & Engineering
SE-41296 GOTHENBURG
Sweden
Tel. +46 31 772 1208
e-mail: imed.hammoud@cse.gu.se

Secretary
Mr. Fulvio FRATI
Università degli Studi di Milano
Department of Computer Science
Via Bramante 65
IT-26013 CREMA
Italy
Tel. +39 03 738 98032
Fax +39 03 738 98010
e-mail: fulvio.frati@unimi.it

AU Elisabeth Chang
AT Stefan Koch
AT Martin Michlmayr
BR Fabio Kon
ES Jesús Gonzalez-Barahona
ES Gregorio Robles
FI Tommi Mikkonen
FR Jean-Michel Dalle
IE Joseph Feller
IE Brian Fitzgerald
IT Ernesto Damiani
IT Fulvio Frati
IT Alberto Silitti
IT Giancarlo Succi
SE Jonas Gamailelsson
SE Bjorn Lundell
US Kevin Crowston
US Scott Hissam
US Greg Madey
US Walt Scacchi
US Sandy Slaughter
US Megan Squire
WG 2.14/6.12/8.10 - Service-Oriented Systems
est. 2011, revised 2012
URL: http://ifip-wg-sos.deib.polimi.it/

Chair
Prof. Luciano BARESI
Politecnico di Milano
Dipartimento di Elettronica e Informazione
Piazza L. Da Vinci, 32
IT-20133 MILANO
Italy
Tel.: +39 02 2399 3638
Fax: +39 02 2399 3574
e-mail: luciano.baresi@polimi.it

Vice-Chairs
Prof. Winfried LAMERSDORF
Universität Hamburg
FB Informatik, VSYS
DE-22527 HAMBURG
Germany
Tel. +49 40 42883 2421/0
Fax +49 40 42883 2328
e-mail: lamersd@informatik.uni-hamburg.de

Secretaries
Prof. Pierluigi PLEBANI
Politecnico di Milano
Dipartimento di Elettronica
Informazione e Biomeccanica
Piazza Leonardo da Vinci, 32
IT-20133 MILANO
Tel. +39 02 2399 3473
Fax +39 02 2399 3411
e-mail: pierluigi.plebani@polimi.it

Prof. Eric DUBOIS
LIST Luxembourg Institute of Science and Technology
IT for Innovative Services
5 Avenue des Hauts Foumeaux
LU-4362 ESCH/ALZETTE
e-mail: eric.dubois@list.lu

AT Schahram Dustdar
CH Cesare Pautasso
DE Andreas Metzger
DE Klaus Pohl
ES Ernesto Pimentel
FI Matti Rossi
FR Nikolaos Georgantas
FR Valerie Issarny
FR Farouk Toumani
GB Nikolay Mehandjiev
GB George Spanoudakis
GB Andrea Zisman
IT Antonio Brogi
IT Ernesto Damiani

WG 2.15/1.9 - Verified Software

WG 2.16 – Programming Language Design
est. 2012
URL: http://program-transformation.org/WGLD

Chair
Dr. Eelco VISSER
SCT / EWI
Delft University of Technology
Mekelweg 4
NL-2628 CD DELFT
The Netherlands
Tel. +31 15 27 87088
Fax +31 15 27 86632
e-mail: e.visser@tudelft.nl

Vice-Chair
Dr. Tijs VAN DER STORM
Centrum Wiskunde & Informatica (CWI)
Software Analysis and Transformation
Science Park 123
NL-1098 XG AMSTERDAM
The Netherlands
Tel. +31 20 592 4164
e-mail: storm@cwi.nl

Secretary
Mr. Jonathan EDWARDS
MIT
Software Design Group
MIT 32-G706
32 Vassar Str.
CAMBRIDGE, MA 02139
USA
Tel. +1 781 910 4480
e-mail: edwards@csail.mit.edu
<table>
<thead>
<tr>
<th>Country</th>
<th>Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>BE</td>
<td>Tom Van Cutsem</td>
</tr>
<tr>
<td>BR</td>
<td>Roberto Ierusalimschy</td>
</tr>
<tr>
<td>CN</td>
<td>Sean McDirmid</td>
</tr>
<tr>
<td>DE</td>
<td>Stefan Hananberg</td>
</tr>
<tr>
<td>DE</td>
<td>Klaus Ostermann</td>
</tr>
<tr>
<td>DE</td>
<td>Markus Voelter</td>
</tr>
<tr>
<td>DK</td>
<td>Erik Ernst</td>
</tr>
<tr>
<td>FR</td>
<td>Manuel Serrano</td>
</tr>
<tr>
<td>GB</td>
<td>Edwin Brady</td>
</tr>
<tr>
<td>GB</td>
<td>Sophia Drossopoulou</td>
</tr>
<tr>
<td>GR</td>
<td>Yannis Smaragdakis</td>
</tr>
<tr>
<td>NZ</td>
<td>James Noble</td>
</tr>
<tr>
<td>UD</td>
<td>Jonathan Aldrich</td>
</tr>
<tr>
<td>US</td>
<td>Andrew P. Black</td>
</tr>
<tr>
<td>US</td>
<td>Gilad Bracha</td>
</tr>
<tr>
<td>US</td>
<td>Kim Bruce</td>
</tr>
<tr>
<td>US</td>
<td>Adam Chipala</td>
</tr>
<tr>
<td>US</td>
<td>William R. Cook</td>
</tr>
<tr>
<td>US</td>
<td>Robby Findler</td>
</tr>
<tr>
<td>US</td>
<td>Matthew Flatt</td>
</tr>
<tr>
<td>US</td>
<td>Sam Tobin-Hochstadt</td>
</tr>
<tr>
<td>US</td>
<td>Daan Leijen</td>
</tr>
<tr>
<td>US</td>
<td>Cristina Lopes</td>
</tr>
<tr>
<td>US</td>
<td>Jan-Willem Maessen</td>
</tr>
<tr>
<td>US</td>
<td>Mark S. Miller</td>
</tr>
<tr>
<td>US</td>
<td>Ross Tate</td>
</tr>
<tr>
<td>US</td>
<td>Mads Torgersen</td>
</tr>
<tr>
<td>US</td>
<td>Alessandro Warth</td>
</tr>
</tbody>
</table>
TC 3 - Education


Chair
Mr. Sindre RØSVIK, NO
Giske commune
NO-6050 NORWAY
Tel. +47 70188012
e-mail: sinro@online.no

Vice-Chair
Prof. Don PASSEY, GB
University of Lancaster
Department of Educational Research
County South, D25
LANCASTER LA1 4YD
United Kingdom
Tel. +44 1524 592314
Fax +44 20 7848 3182
e-mail: d.passey@lancaster.ac.uk

Secretary
Dr. Mary WEBB, GB
King’s College London
Franklin-Wilkins Building
Waterloo Road
LONDON SE1 9NH
United Kingdom
Tel. +44 20 7848 3116
Fax +44 20 7848 3116
e-mail: mary.webb@kcl.ac.uk

Ex-officio members: WG Chairs
*) Special Consultant
**) Observer
***) TC3 elected member

WG 3.1 - Informatics and digital technologies in School Education
est. 2014

Chair
Prof. Eric SANCHEZ
École Normale Supérieure de Lyon
15 parvis René-Descartes
BP 7000
FR-69342 LYON Cedex 07
France
Tel. +33 426 731 255
e-mail: eric.sanchez@ens-lyon.fr

Vice-Chair
Prof. Peter MICHEUZ
Alpen-Adria-Univ. Klagenfurt
KID - Klagenfurter Informatik Didaktik
Universitätsstraße 65 – 67
AT-9020 KLAGENFURT
Austria
Tel. +43 463 2700 3519
Fax +43 463 2700 3598
e-mail: peter.micheuz@uni-klu.ac.at

AT Gerald Futschek
FI Jari Koivisto*
PL Maciej M. Syslo
NL Hans Frederik

AU Nicholas Reynolds
FR Bernard Cornu
BE Athina Kelesidou

CA Alnazz Kassam*
FR Monique Grandbastien
BE Katri Pulkki-Naasko

CH Lukas Dettwiler
FR Caroline Jouveau-Sion
BE Anja Himmelsbach

CH Raymond Morel
GB Gary Beauchamp*
LT Valentina Dagiene

CZ Miroslava Cermochova*
GB Sue Cranmer*
LT Tatjana Jeviskova

DE Torsten Brinda
GB Steve Kennewell*
NL Piet van der Veer

DE Christine Bescherer
GB Cathy Lewin
NO Sindre Rosvik

DE Peter Hubwieser*
GB Avril Loveless*
PL Izabela Mrochen*

DE Matthias Kramer*
GB Robert Munro*
PL Maciej Syslo

DE Johannes Magenheim
GB Mary Webb
SI Andrej Brodnik

DE Ralph Romeike
GB Mary Welsh*
SK Ivan Kalaš

EX OFFICIO MEMBERS: WG CHAIRS

*) Special Consultant
**) Observer
***) TC3 elected member

Error! Bookmark not defined.
**WG 3.3 Research into Educational Applications of Information Technologies**

Re-est. 1988, revised 2004
URL: http://www.ifipwg3-3.org/

**Chair**
Dr. Andrew FLUCK
University of Tasmania
Faculty of Education
Locked Bag 1307
LAUNCESTON, TA 7250
Australia

**Vice-Chairs**
Dr. Cathy LEWIN
Manchester Metropolitan University
Institute of Education

**Secretary**
Dr. Debora LIPSON
Victoria University
Science Education and Math Education

**Intending member**
andrew.fluck@utas.edu.au
e-mail:
c.lewin@mmu.ac.uk
Fax +44 161 247 6981
Tel. +44 161 247 5191
United Kingdom

**Corresponding member**
**Corresponding member**
WG 3.4 - Professional and Vocational Education in ICT

URL: http://www.businessandlaw.vu.edu.au/ifip34/

Chair
Dr. Arthur TATNALL
Victoria University
Victoria Graduate School of Business
P.O. Box 14428
MELBOURNE 8001
Australia
Tel. +61 3 9919 1034
Fax +61 3 9919 1064
e-mail: arthur.tatnall@vu.edu.au

Vice-Chair
Jaana HOLVIKIVI
Helsinki Metropolia University of Applied Science
FI-00079 METROPOLIA
Finland
e-mail: jaana.holvikivi@metropolia.fi

Secretary
Mrs. Barbara TATNALL
Heidelberg Press
PO Box 234
HEIDELBERG 3084
Australia
Tel. +61 3 9459 2562
Fax +61 3 9459 8827
e-mail: barbara@heidelbergpress.com.au

Chair
Prof. Don PASSEY
University of Lancaster
Department of Educational Research
County South, D25
LANCASTER LA1 4YD
United Kingdom
Tel. +44 1524 592314
e-mail: d.pasley@lancaster.ac.uk

Vice-Chair
Prof. Javier OSORIO
Univ. de Las Palmas de Gran Canaria
Fac. de Ciencias Econ. y Empresa
LANCASTER LA1 4YD
Spain
Tel. +34 928 45 28 04
Fax +34 928 45 18 29
e-mail: josorio@dede.ulpgc.es

Secretary
Kim Schildkamp
PhD
Heidelberg Press
PO Box 234
HEIDELBERG 3084
Australia
Tel. +61 3 9459 2562
Fax +61 3 9459 8827
e-mail: barbara@heidelbergpress.com.au

*) Corresponding Member
TC5 - Information Technology Applications

est. 1970, revised 2004
URL: http://www.ifip-tc5.org

Chair
Prof. Tadeusz CZACHÓRSKI, PL
Polish Academy of Sciences
(Institute of Theoretical and Applied Informatics
ul Baltycka 5
PL-44-100 GLIWICE
Poland
Tel. +48 32 231 73 19 ext 213
Fax +48 32 231 70 26
e-mail: tadek@iitis.gliwice.pl

Vice-Chair
Dr. György L. KOVACS, HU
Hungarian Acad. of Sciences
CIM Research Laboratory
Comp. and Autom. Research Institute
Kende u. 13-17
HU-1111 BUDAPEST
Hungary
Tel. +36 1 209 6143
Fax +36 1 466 7503
e-mail: gyorgy.kovacs@sztaki.hu

Secretary
Dr. Philippe DALLEMAGNE, CH
Centre Suisse d’électronique et de microtechnique
CSEM SA
Jaquet-Droz 1
Case Postale
CH-2002 NEUCHATEL
Switzerland
Tel. +41 32 720 5521
Fax +41 32 720 5720
e-mail: philippe.dallemagne@csem.ch

Vice-Chair for IFIP/TC5 rewards
Prof. Dr. Erich J. NEUHOLD, DE
Universität Wien
Fakultät für Informatik
Währinger Straße 29
AT-1090 WIEN
Austria
Tel. +43 1 4177 78801
e-mail: erich.neuhold@univie.ac.at

Vice-Chair for New Activities and Interdiscipl. Cooperation
Prof. Dr. Dimitar VELEV, BG
University of National and World Economy
Faculty of Applied Informatics and Statistics
UNSS - Stud. grad. "Christo Botev/8 Dec"
BG-1700 SOFIA
Bulgaria
Tel. +359 2 8195694
e-mail: dvelev@unwe.acad.bg

Communications Officer
Dr. Ronald WAXMAN, US
EDA Standards Consulting
Retired Principal Scientist at Uva
24975 Hilltop Drive
BEACHWOOD, OH 44133-1351
USA
Tel. +1 216 297 9378
e-mail: waxman@computer.org

Publications & Events Officer
Prof. Gaetano CASCINI, IT
Politecnico di Milano
Dept. of Mechanics
Via Giuseppe La Masa,34
IT- 20156 MILANO
Italy
Tel. +39 02 2399 8463
Fax +39 02 2399 8282
e-mail: gaetano.cascini@polimi.it

AR Gabriela P. Henning
AT Jörg Mühlbacher
CN Renchu Gan
CN Yu Tao*
DE Ralf Denzer*
DE Detlef Kochan*
DK Peter Falster
ES Carlos Juiz
FI Ritta Smeds
FR Guy Doumeingts

GB Umit Bititi*
GB Rae A. Eamshaw
IL Gideon Halevi*
IN Ratan K. Datta
JP Masaru Nakano
KR Byoung-Kyu Choi
MX Noel Leon Rovira*
NL Hamideh Afsarmanesh
NO Kesheng Wang

PT Luis Manuel Camarinho-Matos
RS Ivica Mladenović
SE Jad El-Khoury
SG Nadia Magnenat-Thalmann*
US Mansour Ashkiani
US Gustav Olling (Senior Advisor)
US Jakob Vietstra***
US Michael B. McGrath
US Michael Wozny*

ex-officio members: WG Chairs
*) Individual Member
**) Observer
***) Honorary Member
WG 5.1 - Global Product Development for the whole life-cycle

est. 2006, revised 2009
URL: http://www.ifip-wg51.org

**Chairs**
Prof. Abdelaziz BOURAS
Université Lumière
Lyon 2 - IUT Lumière
160, Bd de l’Université
FR-69676 BRON, Cedex
France
Tel. +33 4 7877 3146
Fax +33 4 7800 6328
e-mail: abdelaziz.bouras@qu.edu.qa

**Vice-Chairs**
for Europe and Africa:
Prof. Alain BERNARD
Ecole Centrale de Nantes
1, rue de la Noë
BP 92101
FR-44321 NANTES Cedex 3
France
Tel. +33 2 40 37 69 66
Fax +33 2 40 37 69 30
e-mail: alain.bernard@irccyn.ec-nantes.fr

for America:
Prof. Debasish DUTTA
University of Illinois
226 Mechanical Engineering Building
1206 West Green Street
URBANA, IL 61801
USA
Tel. +1 217 333 6715
e-mail: ddutta@illinois.edu

for Asia and Pacific:
Dr. Balan GURUMOORTHY
Indian Institute of Science
Department of Mechanical Engineering
IN-BANGALORE 560 012
India
Tel. +91 80 2293 2304
Fax +91 80 2360 1975
e-mail: bgm@mecheng.isc.ernet.in

**Secretary**
Dr. Henk Jan PELS
Technische Univ. Eindhoven
Dept. of Technology Management
Section Information & Technology
P.O. Box 513 Paviljoen
NL-5600 MB EINDHOVEN
The Netherlands
Tel. +31 40 2473948
Fax +31 40 243 2612
e-mail: h.j.pels@tm.tue.nl

AT Peter Hehenberger
BR Eduardo de Senzi Zancul
CA Louis Rivest
CA Darli Vieira
CH Dimitris Kritsis
DE Michael Schabacker
DE Klaus-Dieter Thoben
DE Sandra Vajna
FI Hannele Lampela
FI Hannu Kärkkäinen
FI Anneli Silventoinen
FR Améziane Aoussat
FR Frederic Demoly
FR Benoit Eynard
FR Julien Le Dulgu
FR Nicolas Maranzana
FR Frédéric Noël
FR Yacine Ouzrout
FR Hervé Panetto
FR Lionel Roucoules
FR Frederic Segonds
GB Alison McKay
GB Chris McMahon
GB Robert Young
GR Nikolaos Bilalis
GR Nicholas S. Sapidis
HK George Huang
IT Romeo Bandinelli
IT Paolo Chiabert
IT Umberto Cugni
IT Margherita Peruzzini
IT Sergio Terzi
JP Shuichi Fukuda
JP Young Won Park
KR Jong Gyun Lim
OA Sebti Foufou
RU Alexander Smirnov
TH Nopasit Chakpitak
SE Johan Malmqvist
SG Wen Feng Lu
US Paul Hong
US Chris Paredes
US Sudarsan Rachuri
US Ram Sriram
WG 5.4 Computer Aided Innovation

est. 2005
URL: http://cai.insa-strasbourg.fr/

**Chair**
Prof. Denis CAVALLUCCI  
INSA Graduate School of  
Science and Technology  
Design Engineering Laboratory  
24, Boulevard de la Victoire  
FR-67084 STRASBOURG  
France  
Tel. +33 3 88 14 4755  
Fax +33 3 88 14 4799  
e-mail: denis.cavallucci@insa-strasbourg.fr

**Publication Officer**  
Dr. Cecilia ZANNI-MERCK  
ICube – UMR 7357  
300 Bd Sébastien Brant  
BP 10413  
FR-67412 ILLKIRCH Cedex  
France  
Tel. +33 3 68 854579  
Fax +33 3 68 854455  
e-mail:cecilia.zanni-merk@unistra.fr

**AR** Martin Marchetta  
**AU** Ricardo Palma  
**BR** Edward Szczebicki  
**BR** Marco Aurelio de Cervalho  
**CN** Juan D. Velasquez Silva  
**CN** Runhua Tan  
**DE** Thomas Nagel  
**ES** Manuel Grana  
**ES** Carlos Toro  
**FI** Eric Coatanea  
**FR** Amadou Coulibaly  
**FR** Roland De Guio  
**GB** Paul Prickett  
**GB** Rossi Setchi  
**IT** Carlo Angelini  
**IT** Gaetano Cascini  
**IT** Gualtiero Fantoni  
**IT** Davide Russo

WG 5.5 Co-operation Infrastructure for Virtual Enterprises and Electronic Business - "COVE"

est. 2001
URL: https://sites.google.com/site/ifipcove/

**Chair**  
Prof. Luis M. CAMARINHA-MATOS  
New University of Lisbon  
Campus de Caparica  
PT-2829-516 MONTE CAPARICA  
Portugal  
Tel. +351 212948517  
Fax +351 212941253  
e-mail: cam@uninova.pt

**Vice-Chair**  
For Australia and Asia:  
Dr. Peter BERTOK  
RMIT University  
School of Computer Science & Information Technology  
GPO Box 2476  
AU-MELBOURNE 3001  
Australia  
Tel. +61 3 9925 1851  
Fax +61 3 9662 1617  
e-mail: peter.bertok@rmit.edu.au

**Vice-Chair**  
For Europe:  
Prof. Xavier BOUCHER  
ENSMSE-Ecole Nationale  
Superiure des Mines de St. Etienne  
158 Cours Fauriel  
FR-42023 ST. ETIENNE Cedex  
France  
Tel. +33 04 77 42 01 33  
Fax +33 04 77 42 66 66  
e-mail: boucher@emse.fr

**BR** Ricardo J. Rabelo  
**BR** Rolando Vallesjos  
**CA** Weiming Shen  
**CH** Myrna Flores  
**CH** Michel Poully  
**CR** Cesar Ganta  
**DE** Bernhard Katzy  
**DE** Kurt Kosanke  
**FR** Frederique Biennier  
**FR** Pierre Maret  
**GR** Garyfallos Fragidis  
**GR** Adamantios Kournpis  
**HU** Julius Herman  
**HU** György L. Kovacs  
**IT** Dario Antonelli  
**IT** Rosanna Fornariello  
**IT** Rinaldo C. Micheli  
**JP** Toshiya Kaihara  
**LU** Francois Vernadat  
**MO** Tomasz Janowski  
**MX** Arturo Molina  
**NL** Hamideh Afsarmanesh  
**PT** Americo Azevedo  
**PT** Goran Putnik  
**PT** Luis Osorio  
**PT** Jorge Pinho Sousa  
**US** H. Ted Goranson  
**US** Shimon Y. Nof
WG 5.7 Advances in Production Management Systems


URL: http://www.ifipwg57.org

Chair
Dr. Dimitris KIRITSIS
Ecole Polytechnique
Fédérale de Lausanne
STI-IGM-LICP
ME A1 396
Station 9
CH-1015 LAUSANNE
Switzerland
Tel. +41 21 693 51 63
Fax +41 21 693 35 53
e-mail: dimitris.kiritsis@epfl.ch

Vice-Chairs
for Europe:
Prof. Dr.-Ing. Klaus-Dieter THOBEN
Universität Bremen und Bremer Institut fuer Produktion und Logistik
GmbH (BIBA)
PO-Box 33 05 60
DE-28335 BREMEN
Germany
Tel. +49 421 218 5529
Fax +49 421 218 5610
e-mail: tho@biba.uni-bremen.de

for Asia-Pacific:
Prof. Shigeki UMEDA
Musashi University
1-26 Toyotama-kami Nerima
TOKYO 176-8534
Japan
Tel. +81 35 984 3837
Fax +81 33 991 1198
e-mail: shigeki@cc.musashi.ac.jp

Secretary
Mr. Gregor von CIEMINSKI
ZF Friedrichshafen AG
Ehlersstrasse 50
DE-88038
FRIDRICHSHAFEN
Germany
Tel. +49 7541 77 960330
Fax +49 7541 77 900330
e-mail: gregor.cieminski@zf.com

Vice Chair for Asia-Pacific:
Prof. Shigeki UMEDA
Musashi University
1-26 Toyotama-kami Nerima
TOKYO 176-8534
Japan
Tel. +81 35 984 3837
Fax +81 33 991 1198
e-mail: shigeki@cc.musashi.ac.jp

AT Susanne Altendorf-Kaiser
FR Samuel Gomes
KR Hyunbo Cho
BR Ireniza de Alencar Nääs
FR Bernard Grabot
KR Byoung-Kyu Choi
BR Ricardo José Rabelo
FR Gilles Neubert
KR Ilkeqong Moon
BR Joao Mendes dos Reis
FR André Thomas
KR Sang Do Noh
CH Alfred Büchel*
FR Bruno Vallespir
KR Jinwoo Park
CH Soumya El Kadiri
GB Limit S. Bitici
MY Erry Yulian Triblas Adesta
CH Torbjörn Netland
GB Allan S. Carrie*
MX David Romero
CH Thomas E. Ruppil
GB Stephen Childe
NL Henk-Jan Pels
CH Paul Schönleben
GB Melanie Despeisse
NL J. E. Rooda
CN Shengchun Deng
GB Manuel Fadinho
NL Jacques H. Trieneke
CN Guang Xun Yang
GB Christopher Ingens
NL Hans Wortmann
DK Lenka Landryova
GB Ashok K. Kashar
NO Eriand Aalnes
DE Gerhard Gudergan
GB Ming K. Lim
NO Bjørn Andersen
DE Bernd Hamacher
GB Kepa Mendibil
NO Heidi Carin Dreyer
DE Bernd E. Hirsch*
GR Christos Emmanouilidis
NO Jan Frick
DE Jan Peter Lechner
GR Dimitris Mourtzis
NO Asbjørn Rolstadås
DE Hermann Lödding
GR Ioannis A. Pappas*
NO Jan Ola Strandhagen
DE Kai Mertins
GR Illas Tatsiopoulos
PL Tomasz Koch
DE Ralph Riedel
IE Jim Browne
PL Krzysztof Santarek
DE Christoph Roser
IE Harinder Singh Jagdev
PL Stanislav Strzelczak
DE Volker Stich
IE David O’Sullivan
PT Luis Manuel Camarinha-Matos
DE Hans-Hermann Wiendahl
IL Gideon Halevi
RS Vidosav D. Majstorovich
DE Hans-Peter Wiendahl
IT Sergio Cavaliere
SE Robert W. Grubbström
DE Gert Zölich
IT Paolo Gaiardelli
SE Fredrik Persson
DK Peter Falster
IT Marco Macchi
SE Martin Rudberg
DK Hans-Henrik Hvoelry
IT Alberto Portioli Staudacher
SE Joakim Wikner
DK John Johansen
IT Mario Rapaccini
SK Iveta Zołotowá
DK Jens Ove Riis
IT Marco Taisch
SI Slavko Dolišek
DK Ken Steger-Jensen
IT Sergio Terzi
TR Gunduz Ulusoy
ES Adolfo Crespo
IT Mario Tucci
US Farhad Ameri
ES Adriana Giret
IT Agostino Villa
US Thomas R. Gull ide, Jr.
FI Eero Eloranta
JP Eiji Arai
US Boonserm Kuvatavnyou
FI Riitta Smeds
JP Susumu Fuji
US Thomas R. Kurfess
FI Kari Tanskanen
JP Masahiko Fuyuki
US Andrew Kusiak
FR Thècle Alix
JP Hironori Hibiino
US Selwyn Piramuthu
FR Frédérique Biennier
JP Ichiro Inoue
US John P. Shewchuk
FR Magali Bosch-Mauchand
JP Toshiya Kihara
US Dan L. Shunk
FR Abdelaziz Bouras
JP Hajime Muzuyama
US Vijay Srinivasan
WG5.8 Enterprise Interoperability

est.2006, revised 2008 URL: https://www.ifip-ei.org/members

Chair
Prof. Lea KUTVONEN
University of Helsinki
Department of Computer Science
FI-00014 HELSINKI
Finland
Tel. +358 50 415 1714
e-mail: lea.kutvonen@cs.helsinki.fi

Vice-Chairs
Prof. Ulrike LECHNER
Universität der Bundeswehr, München
Dept.of Business Informatics
Werner Heisenberg Weg 39
DE-85577 NEUBIBERG
Germany
Tel. +49 89 6004 2504
e-mail: ulrike.lechner@unibw.de

Secretary
Dr. Georg GROSSMANN
University of South Australia
School of Information Technology and Mathematical Sciences
Mawson Lakes Campus
AU-ADELAIDE, SA 5001
Australia
Tel. +61 8 830 23194
Fax +61 8 930 23988
e-mail: georg.grossmann@cs.unisa.edu.au

Treasurer
Prof. Stephan KASSEL
University of Applied Sciences
Faculty of Economics and Business Administration
Scheffelstraße 39
DE-08066 ZWICKAU
Germany
Tel. +49 375 536 3492
Fax +49 375 536 3104
e-mail: stephan.kassel@fh-zwickau.de

*) Honorary member
**) Web Site Responsibles (Content)
***) Event Coordinator
WG 5.10 - Computer Graphics and Virtual Worlds

est. 1987, revised 1994, 2012
URL: http://cospace.sce.ntu.edu.sg/ifip/

Chair
Dr. Alexei SOURIN
Nanyang Technological University
School of Computer Engineering
Nanyang Avenue
SINGAPORE 639798
Singapore
Tel. +65 6790 4292
Fax +65 6792 6559
e-mail: assourin@ntu.edu.sg

Vice-Chair
Prof. Dr. Rae A. EARNSHAW
Univ. of Bradford
Dept. of Electronic Imaging and Media Communications
Richmond Rd
BRADFORD BD7 1DP
West Yorkshire
United Kingdom
Tel. +44 1 274 234 001
Fax +44 1 274 233 727
e-mail: r.a.earnshaw@bradford.ac.uk

CH Daniel Thalmann
CN Zhigeng Pan
DE Wolfgang Müller-Wittig
DE Franz-Erich Wolter
ES Andres Ignesias
GB Ken Brodlie
GB Nigel W. John
HU György L. Kovacs
IT Bianca Falcidieno
IT Gianluca Mura
JP Issei Fujishiro
JP Toshiyasu L. Kunii
JP Xiaoyang Mao
JP Masayuki Nakajima
KR Myoung-Hee Kim
RU Stanislav Klimenko
SG Nadia Magnenat-Thalmann
SG Olga Sourina
US Norman Badler

WG 5.11 Computers and Environment

URL: http://ifipwg511.org

Chair
DI Gerald SCHIMAK
AIT Austrian Institute of Technology GmbH
Information of Management & eHealth, Safety & Sec.Dept.
AT-2444 SEIBERSDORF
Austria
Tel: +43 50550 3125
Fax +43 50550 2813
e-mail: gerald.schimak@ait.ac.at

Vice-Chair
Dr. Steven P. FRYSINGER
James Madison University
College of Integrated Science and Technology
701 Carrier Drive – MSC 4102
HARRISONBURG, VA 22807
USA
Tel. +1 540 568 2710
Fax +1 540 568 2768
e-mail: frysinsp@jmu.edu

Secretary
Prof. Dr. Jiří HŘEBIČEK
Masaryk University
Inst. of Biostatistics and Analyses
Kamenice 126/3
CZ-625 00 BRNO
Czech Republic
Tel. +420 549 493 186
e-mail: hrebicek@iba.muni.cz

AT Alexander Kaufmann
AT Werner Pilmann
AT Wilfried Winiwarter
AU Robert Argent
AU Ian Bishop
AU Anthony Jakeman
AU Ben Leighton
AU Claire Miller
AU Kerry Taylor
AU William Young
CA William Booty
CA Daryl H. Hepting
CA David Swayne
CH Andrea Rizzoli
CH Ioannis Athanasiadis
CZ Tomáš Pittner
DE Ralf Denzer
DE Peter Fischer-Stabel
DE Reiner Güttler
DE Roman Lenz
DE Thorsten Schlachter
DE Thomas Usländer
ES Jose Lorenzo
EU Hugo de Groof
FI Ari Jolma
FI Maunu Rönkkö
GR Kostas Karatzas
IT Giorgio Guariso
IT Giorgio Guariso
US Brian Miles
US Nigel Quinn
WG 5.12 Architectures for Enterprise Integration

est. 1995, revised 2008

Chair
Prof. Dr. Peter BERNUS
Griffith University
School of Computing & Inf.
NATHAN, QLD 4111
Australia
Tel. +61 7 875 5039
Fax +61 7 875 5051
e-mail: p.bernus@griffith.edu.au

Vice-Chair
Prof. Richard H. WESTON
Loughborough Univ. of Technol.
LOUGHBOROUGH LE1 3TU
United Kingdom
Tel. +44 1509 222 907
Fax +44 1509 267 725
e-mail: r.h.weston@lut.ac.uk

Chair
Prof. Dr. Peter BERNUS
Griffith University
School of Computing & Inf.
NATHAN, QLD 4111
Australia
Tel. +61 7 875 5039
Fax +61 7 875 5051
e-mail: p.bernus@griffith.edu.au

Vice-Chair
Prof. Richard H. WESTON
Loughborough Univ. of Technol.
LOUGHBOROUGH LE1 3TU
United Kingdom
Tel. +44 1509 222 907
Fax +44 1509 267 725
e-mail: r.h.weston@lut.ac.uk

AT Peter Kopacek
AT Norbert Roszenich
AU Laszlo Nemes
AU Liibsa Vlacic
CA Fadi G. Fadel
CA Mark Fox
CA John M. Popoulos
CA Ajit Pardasani
CN Yuliu Chen
CN Zengjin Han
DE Kurt Kosarut
DE Matthias Jarke
DE Roland Jochem
DE Gunter Schmidt
DK H. J. Molstand
DK Johan Vesterager
ES Luis Basanez
ES Angel Ortiz
FR Vincent Chapurlat
FR David Chen
FR Guy Doumeingts
FR Joel Favrel
GB John Edwards
GB S.K. Banerjee
GB David Shorter
HU Geza Haidegger
HU Gyorgy L. Kovacs
IE Jim Browne
JP Yoshiro Fukuda
JP Atsushi Inamoto
JP Yusaku Shibata
LU Francois Vernadat
MX Arturo Molina Gutierrez
PT João José Pinto Ferreira
RO Mihai Avram
RO Florin Filip
SG Cheng Leong Ang
SG Sam Bansal
SI Brane Kapic
US James Brosvic
US Hong Li
US Christoph J. Bussler
US Michael Gruninger
US Bruce Guthridge
US James Nevins
US Leo Obrst
US Jakob Vlieistra
US Theodore J. Williams

WG 5.13 Bioinformatics and its Applications

est. 2010, revised 2015

Chair
Dr. K. R. PARDASANI
Maulana Azad National Institute of Technology (MANIT)
Department of Mathematics and Humanities
IN-462051 BHOPAL
India
Tel. +91 755 267 1486
e-mail: kamalrajp@rediffmail.com

Vice-Chair
to be determined

Secretary
Dr. Neeru ADLAKHA
S.V. National Institute of Technology
Department of Applied Mathematics
Ichchhanath,
IN-395007 SURAT, GURAJAT
India
e-mail:neeru.adlakha21@gmail.com

AT Philipp Keugler
AT Milan Stehlik
AU Maja Hadzic
BW Jagdish Prakash
CN Hong Xue
CZ Jaroslav V. Burda
DE Jürgen Borlak
DE Roll P. Wurzt
FR Jean-Michel Claverie
GB Vijayalakshmi Chelliah
GB Sara Kalvala
HK Siu Ming Yiu
IL Ron Shamir
IN Rattan K. Datta
IN Dharmindeh Kumar
IN V.P. Saxena
IN R.S. Tyagi
IT P. Arrigo
JP Masaru Tomita
MA A. Moussa
MY Zeti Azura Hussein
NP D.B. Gurung
NZ Madhav Bhatia
NZ Nikola Kasabov
RU Maria G. Samsonova
SG B. Mohanty
TR Hasan Ogul
TT Baliswaroop Bhatt
US Elizabeth Ray DeLong
US Warren J. Ewens
US Matthew He
US Mamoru Kato
US Marcos S. Pinto

43
WG5.14 - Advanced Information Processing for Agriculture

est. 2010 (SIG5.1), revised 2012, 2013

**Chair**
Prof. Dr. Daoliang LI  
China Agricultural University  
Director of CICTA  
17 Tsinghua East Road  
BEIJING 100083  
P.R. China  
Tel. +86 10 6273 6764  
Fax +86 10 6273 7679  
e-mail: dliangl@cau.edu.cn

**Vice-Chairs**
Dr. Zhenbo LI  
China Agricultural University  
17 Tsinghua East Road  
BEIJING 100083  
P.R. China  
Tel. +86 10 6273 8751  
Fax +86 10 6273 8751  
e-mail: zhenbolin@gmail.com

Dr. Yingyi CHEN  
China Agricultural University  
17 Tsinghua East Road  
BEIJING 100083  
P.R. China  
Tel. +86 10 6273 8489  
Fax +86 10 6273 7741  
e-mail: chyingyi@126.com

**Secretary**
Mr. Lihong SHEN  
China Agricultural University  
17 Tsinghua East Road  
BEIJING 100083  
P.R. China  
Tel. +86 10 6273 7994  
Fax +86 10 6273 7741  
e-mail: hnsih@cau.edu.cn

<table>
<thead>
<tr>
<th>Country</th>
<th>Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>AT</td>
<td>Alexander Schatten</td>
</tr>
<tr>
<td>CA</td>
<td>Simon Xianyi Yang</td>
</tr>
<tr>
<td>CN</td>
<td>Hongxin Cao</td>
</tr>
<tr>
<td>CN</td>
<td>Guifen Chen</td>
</tr>
<tr>
<td>CN</td>
<td>Longmeng Chen</td>
</tr>
<tr>
<td>CN</td>
<td>Ming Chen</td>
</tr>
<tr>
<td>CN</td>
<td>Dongjian He</td>
</tr>
<tr>
<td>CN</td>
<td>Gaojun Huang</td>
</tr>
<tr>
<td>CN</td>
<td>Lan Huang</td>
</tr>
<tr>
<td>CN</td>
<td>Wenjiang Huang</td>
</tr>
<tr>
<td>CN</td>
<td>Ping'an Jiang</td>
</tr>
<tr>
<td>CN</td>
<td>Minian Li</td>
</tr>
<tr>
<td>CN</td>
<td>Yong Liang</td>
</tr>
<tr>
<td>CN</td>
<td>Guiping Liao</td>
</tr>
<tr>
<td>CN</td>
<td>Yande Liu</td>
</tr>
<tr>
<td>CN</td>
<td>Ling Lu</td>
</tr>
<tr>
<td>CN</td>
<td>Ximing Ma</td>
</tr>
<tr>
<td>CN</td>
<td>Yuli Shen</td>
</tr>
<tr>
<td>CN</td>
<td>Zhou Shi</td>
</tr>
<tr>
<td>CN</td>
<td>Zhongfu Sun</td>
</tr>
<tr>
<td>CN</td>
<td>Guifa Teng</td>
</tr>
<tr>
<td>CN</td>
<td>Jinming Wang</td>
</tr>
<tr>
<td>CN</td>
<td>Ke Wang</td>
</tr>
<tr>
<td>CN</td>
<td>Xinjian Xiang</td>
</tr>
<tr>
<td>CN</td>
<td>Zhengmiao Xie</td>
</tr>
<tr>
<td>CN</td>
<td>Benhai Xiong</td>
</tr>
<tr>
<td>CN</td>
<td>Heru Xue</td>
</tr>
<tr>
<td>CN</td>
<td>Wenzhu Yang</td>
</tr>
<tr>
<td>CN</td>
<td>Jinheng Zhang</td>
</tr>
<tr>
<td>CN</td>
<td>Guomin Zhou</td>
</tr>
<tr>
<td>DE</td>
<td>Thomas Rauschenbach</td>
</tr>
<tr>
<td>GB</td>
<td>Yanqing Duan</td>
</tr>
<tr>
<td>HU</td>
<td>Béla Csukás</td>
</tr>
<tr>
<td>HU</td>
<td>Mónika Varga</td>
</tr>
<tr>
<td>IN</td>
<td>Sweta Ramole</td>
</tr>
<tr>
<td>IN</td>
<td>Eldho Thekkilakkattulye</td>
</tr>
<tr>
<td>KR</td>
<td>Jin-Yong Choi</td>
</tr>
<tr>
<td>NL</td>
<td>Gerrit van Straten</td>
</tr>
<tr>
<td>PT</td>
<td>Raul Morais dos Santos</td>
</tr>
<tr>
<td>US</td>
<td>Changying Li</td>
</tr>
<tr>
<td>US</td>
<td>Kuan-Chong Ting</td>
</tr>
</tbody>
</table>
TC 6 - Communication Systems

est. 1971, revised 1987 and 1991
URL: http://ifip.informatik.uni-hamburg.de/ifip/tc6

Chair
Prof. Dr. Aiko PRAS, NL
University of Twente
Electrical Engineering,
Mathematics and Computer
Science
P.O. Box 217
NL-7500 AE ENSCHEDE
The Netherlands
Tel. +31 53 489 3778
Fax +31 53 489 4524
e-mail: a.pras@utwente.nl

Vice-Chair
Dr. Siraj SHAIKH, GB
Coventry University
Department of Computing and
Digital Environment
Priory Street
COVENTRY CV1 5FB
United Kingdom
Tel. +44 2476 888 225
Fax +44 7939 233 995
e-mail: siraj.shaikh@gmail.com

AT Peter Reichl DE Volker Nötzold**
BE Andre Danthine* DE Otto Spaniol
BE Guy Leduc ES Ana Pont-Sanjuan
BG Kiril Boyanov FI Raimo Kantola
BR Jose Neuman de Souza FR Louis Pouzin*
CA Raouf Boutaba FR Guy Pujolle
CH Stéphane Koch GB Peter Radford
CH Harry Rudin* HU Sarolta Dibuz
CY Antonis Hadjiantonis JP Hitoshi Aida

ex-officio members: WG Chairs
*) Honorary Member
**) Website Maintenance

WG 6.1 - Architectures and Protocols for Distributed Systems

URL: https://ifip.informatik.uni-hamburg.de/ifip/tc/6/wg/6.1

Chair
Prof. Jean-Bernard STEFANI
INRIA Rhône-Alpes
Inovallée
655 Avenue de l'Europe
Montbonnot
FR-38334 ST. ISMIER Cedex
France
Tel. +33 4 7661 5257
Fax +33 4 7661 5252
e-mail: jean-bernard.stefani@inria.fr

Vice-Chair
Prof. Rui OLIVEIRA
Departamento de Informática
Universidade do Minho
PT-4710-057 BRAGA
Portugal
Tel. +351 253 604 452
e-mail: rco@di.uminho.pt

AU Kerry Raymond FI Lea Kuvonen
BE Guy Leduc FI Martti Tieneri
CA Gregor v. Bochmann FR Ana Rosa Cavalli
CA Luigi Logrippo FR Michel Diaz
CA Alexandre Petrenko FR Roland Groz
CA Jacob Slowim FR Elle Najm
CH Rachid Guerraoui GB Gordon Blair
CH Harry Rudin* GB Howard Bowman
DE Dieter Hogrefe GB John Derrick

ex-officio members: WG Chairs

AU Kerry Raymond FI Lea Kuvonen
BE Guy Leduc FI Martti Tieneri
CA Gregor v. Bochmann FR Ana Rosa Cavalli
CA Luigi Logrippo FR Michel Diaz
CA Alexandre Petrenko FR Roland Groz
CA Jacob Slowim FR Elle Najm
CH Rachid Guerraoui GB Gordon Blair
CH Harry Rudin* GB Howard Bowman
DE Dieter Hogrefe GB John Derrick

** NG Aiayi Ebenezer
*** NO Finn Arne Aagesen
** PL Adam Grzech
** PT Augusto Casaca*
** PT Edmundo Monteiro
** SE Gunnar Karlsson
** SG Francis Lee Bu Sung
** SK Ivan Kotulak

45
**WG 6.2 - Network and Internetwork Architectures**

_est. 1994, revised 2000, 2009_

_URL: https://ifip.informatik.uni-hamburg.de/ifip/tc/6/wg/6.2_

**Chair**
Prof. Jordi DOMINGO-PASCUAL  
Universitat Politècnica de Catalunya  
Departament d'Arquitectura de Computadors  
Jordi Girona, 1-3  
ES-08034 BARCELONA  
Catalunya, Spain  
Tel. +34 934016981  
Fax +34 934017055  
e-mail: jordi.domingo@ac.upc.edu

**Vice Chair**
Prof. Dr.-Ing. Georg CARLE  
Network Architect. and Services Institute for Informatics  
TU München  
Boltzmannstr. 3  
DE-85748 GARCHING/ München  
Germany  
Tel. +49 89 289 18030  
Fax +49 89 289 18033  
e-mail: carle@in.tum.de

**Secretary**
Dr. Jörg WIDMER  
Institute IMDEA Networks  
Avenida del Mar Mediterraneo, 22 ES-28918 LEGANES, Madrid  
Spain  
Tel. +34 91 481 6994  
Fax +34 91 481 6965  
e-mail: widmer@acm.org

AT  Helmut Leopold  
AT  Reinhard Posch  
AU  Aruna Seneviratne  
BE  Andre Danthine  
BE  Guy Leduc  
BR  Otto Carlos M. Duarte  
BR  Jose Neuman de Souza  
CA  Raouf Boutaba  
CA  Nicolas D. Georganas  
CA  Andre Girard  
CH  Torsten Braun  
CH  Jean-Yves Le Boudec  
CH  Burkhard Stiller  
CZ  Robert Bestak  
CZ  Lukas Kenci  
DE  Wolfgang Effelsberg  
DE  Paul J. Kuehn  
DE  Radu Popescu-Zeletin  
DE  Erwin P. Rathgeb

DE  Stefan Fischer  
DE  Kurt Gehrs  
DE  Reinhard Gotzheim  
DE  Hartmut Koenig  
DE  Stefan Leue  
ES  David de Frutos Escrig

GB  Joe Sventek  
GB  Ken J. Turner  
HK  Samuel Chanson  
HU  Miklos Boda  
HU  Sarolta Dibuz  
HU  Katalin Tarnay

US  Vinton Cerf *  
US  Gerard J. Holzmann  
US  Peter Honeyman  
US  Carolyn Talcott  
US  Richard L. Tenney  
ZA  Pieter S. Kritzinger

*) honorary member
WG 6.3 - Performance of Communication Systems
est. 1994, revised 2001, 2010
URL: http://cnd.iit.cnr.it/ifipwg63/

Chair
Dr. Andrea PASSARELLA
IIT-CNR
Via G. Moruzzi, 1
IT-56124 PISA
Italy
Tel. +39 050 315 3269
Fax +39 050 315 2593
e-mail: a.passarella@iit.cnr.it

AT Guenter Haring
BE Chris Blondia
BE Benny Van Houdt
BR Luis Felipe M. de Moraes
BR Edmundo de Souza e Silva
CA Catherine Rosenberg
CH Ilia Iliaidis
CY Andreas Pitsilides
DE Otto Spaniol
EG Khaled Fouad Elsayed
ES Sebastian Galmas
ES Ramon Puigjaner
FI Ilka Norros
FR Eitan Altman
FR Tulin Atmaca
FR Raymond Marie
FR Guy Pujolle
GB Erol Gelenbe
GB Peter Key
GB Demetres D. Kouvelos
GR Kimon Kontovasili
GR Nikolai M. Mitrou
GR Ioannis Stavrakakis
HU Tamas Henk
HU Sandor Molnar
IL Raphael Rom
IL Moshe Sidi
IT Marco Conti
IT Domenico Ferrari
IT Luigi Fratta
IT Stefano Giordano
JP Kono Suzuki
JP Yutaka Takahashi
NL Boudewijn R. Haverkort
NL Hans van den Berg
NO Bjarne E. Helvik
PL Michal Pioro
SE Ulf Koerner
TR Cem Ersoy
US Anthony Ephremides
US Do Young Eun
US Andras Farago
US Jim Kurose
US Debasis Mitra
US Harry G. Perros
US William J. Stewart
US Satish K. Tripathi
US Kishor S. Trivedi
US Yannis Viniotis
US Linsong Xu

WG 6.6 - Management of Networks and Distributed Systems
URL: http://www.simpleweb.org/ifip/

Chair
Prof. Dr. Olivier FESTOR
LORIA-INRIA Lorraine
Technopole de Nancy-Brabois-
Campus scientifique
615, rue de Jardin Botanique –
B.P. 101
FR-54600 VILLERS LES
NANCY Cedex
France
Tel. +33 3 83 59 30 66
Fax +33 3 83 41 30 79
e-mail: olivier.festor@loria.fr

Vice Chair
Prof. Dr. Burkhard STILLER
University of Zurich
Department of Informatics (IFI),
BIN 2. E. 03
Birmühlestrasse 14
CH-8050 ZÜRICH
Switzerland
Tel. +41 44 635 67 10
Fax +41 44 635 68 09
e-mail: stiller@ifi.uzh.ch
WG 6.9 - Communication Systems for Developing Countries

est. 2002
URL: https://ifip.informatik.uni-hamburg.de/ifip/tc/6/wg/6.9

Chair
Dr. Siraj SHAIKH
Coventry University
Department of Computing and Digital Environment
Priory Street
COVENTRY CV1 5FB
United Kingdom
Tel. +44 2476 888 225
Fax +44 7939 233 995
e-mail: siraj.shaikh@gmail.com

Vice-Chair
Dr. Rodrigo SANTOS
Universidad Nacional del Sur
CONICET
Avda Alem 1253
Argentina
Tel. +54 291 4595181
Fax +54 291 4595154
e-mail: ierms@criba.edu.ar

WG 6.10 - Photonic Networking

est. 1998
URL: https://ifip.informatik.uni-hamburg.de/ifip/tc/6/wg/6.10

Chair
Dr. Tibor CINKLER
Budapest Univ. of Technology and Economics (BME)
Dept. of Telecommunications and Media Informatics (TMIT)
Magyar tudósok körútja 2
HU-1117 BUDAPEST
Hungary
Tel. +36 1 463 1861
Fax +36 1 463 3107
e-mail: cinkler@tmit.bme.hu

Vice-Chair
Dr. Jacek RAK
Gdansk University of Technology
Faculty of Electronics, Telecomm. and Informatics
Narutowicza 11/12
PL-80-233 GDANSK
Poland
Tel. +48 58 347 17 38
Fax +48 58 341 61 32
e-mail: jrak@pg.gda.pl

AD Miquel Nicolau I Vila CLEI Benjamin Barán GR Dimitris Varoutas
AE Greg Kelaart-Courtney DK Villy Baek Iversen IN S.V. Raghavan
BR Jose Neumann de Souza ES Ana Pont-Sanjuan PT Augusto Casaca
CA Raouf Boutaba ES Ramon Puigjaner
WG 6.11 - Communication aspects of the e-World

est. 2000, revised 2001, 2010
URL: http://ifip.informatik.uni-hamburg.de/ifip/tc/6/wg/11

Chair
Dr. Matti MÄNTYMÄKI
University of Turku
Business Informatics
Turku School of Economics
FI-20014 TURUN YLIOPISTO
Finland
e-mail: matti.mantymaki@utu.fi

Vice-Chair
Prof. Dr. Winfried LAMERSDORF
University of Hamburg
Business Informatics
Faculty for Math., Informatics, and Economics
Vogt-Kölln-Str. 30
DE-22527 HAMBURG
Germany
tel. +49 40 42883 2421
Fax +49 40 42883 2328
e-mail: lamersd@informatik.uni-hamburg.de

Secretary
Dr. Jarogniew RYKOWSKI
Dept. of Information Technology
The Poznan University of
Faculties for Math., Informatics, and Economics
Mansfelda 4
PL-60 854 POZNAN
Poland
tel. +48 61 8480549
e-mail: rykowski@kti.ue.poznan.pl

AT Roland Traunmüller
AU Zoran Milosevic
AU Paula Swatman
BE Dirk Deschoolmeester
BR Amerilo A. N. Amorim
BR Manuel J. Mendes
CH Dimitri Konstantas
CH Reinhard Riedl
CH Katarina Stanoevska-Slabeva
CH Hans-Dieter Zimmermann
CL Narciso Cerpa
CN Lei Cheng
CN Jie Huang
CN Benxi Lao
CN Chen Ming
CN Zwichao Sun
CN Chun-hui Tan
CN Haishan Tian
CN Weijun (Joe) Wang
CN Ruxuan Yang
CN Jing Zhao
CN Rongying Zhao
CN Bo Meng
CN Markus Bick
CN Melanie Bickino
CN Rüdiger Grimm
CN J. Felix Hampe
CN Irene Krebs
CN Kai Rannenberg
CN Volker Tschammer
CN Maria Wimmer
FI Hongxiu Li
FI Harri Oinas-Kukkonen
FI Reima Suomi
GB Santosh K. Shrivastava
GR Lefkada Papacharalambos
GR Despina Polemi
GR Spyridon Papastergiou
GR Aphrodite Tsalgatidou
JP Motohisa Funabashi
JP Ryoichi Sasaki
JP Kyoko Yamori
MY Kok-Wai Chew
NL Hans Weigand
PL Wojciech Cellary
PT Carlos Alberto
PT Jose Machado
PT Jose Neves
SE Regis Cabral
TN Farouk Kamoun
US Rolf T. Wigand
ZA Koos Koen

WG 6.12/8.10/2.14 - Service-Oriented Systems
TC 7 - System Modeling and Optimization

est. 1972
URL: http://www.math.tu-berlin.de/IFIP-TC7

Chair
Prof. Dr. Fredi TRÖLTZSCH, DE
Technische Universität Berlin
Fakultät II – Mathematik und Naturwissenschaften
Sekretariat MA 4-5
Strasse d. 17. Juni 136
DE-10623 BERLIN
Germany
Tel. +49 30 314 79 688
Fax +49 30 314 78 658
e-mail: troeltzsch@math.tu-berlin.de

Vice-Chairs
Prof. Dr. Lukasz STETTNER, PL
Polish Academy of Sciences
Institute of Mathematics
Dep. of Probability Theory and Mathematics of Finance
Sniadeckich 8
PL-00-956 WARSAW
Poland
Tel. +49 22 52 28 126
Fax +49 22 52 28 597
e-mail: l.stettner@impan.pl

AT Barbora Kaltenbacher
BE Philippe Toint
BR Edmundo de Souza e Silva
CZE Jiri Outrata
DE Josef Stoer*

ex-officio members: WG Chairs
*) Honorary member
**) Member recommended by TC7

WG 7.1- Modeling and Simulation
est. 1972 Aims and Scopes

Chair
Prof. Dr. Andrzej PALCZEWSKI
University of Warsaw
Faculty of Mathematics, Informatics and Mechanics
2 Banach St.
PL-02097 WARSAW
Poland
Tel. +48 22 5544 467
Fax +48 22 5544 397
e-mail: apalczew@mimuw.edu.pl

BE Tom Dhaene
CA Ruppa Thulasiram
IT A. De Santis
JP Shin-Ichi Aihara

LT N. Telksnis
NL Arunabha Bagchi
US N. De Ciaris
US R. Leland

US J. Meditch
US Firdaus Udwadia
ZA P.-J. Vermeulen
ZA Cobus Nel

51
WG 7.2 - Computational Techniques in Distributed Systems

est. 1973
URL: http://www.math.virginia.edu/~ifip/wg72/

Chair
Prof. Dr. Dietmar HÖMBERG
WIAS
Weierstraß-Institut
Mohenstraße 39
DE-10117 BERLIN
Germany
Tel. +49 30 20372 491
Fax +49 30 20372 313
e-mail: dietram.hoemberg@wias-berlin.de

Vice-Chair
Prof. Dr. George AVALOS
University of Nebraska-Lincoln
Department of Mathematics
323 Avery Hall
LINCOLN, NE 68588
USA
Tel. +1 402 472 7234
Fax +1 402 472 8466
e-mail: gavalos@math.unl.edu

Secretary
Dr. Lorena BOCIU
North Carolina State University
Dept. of Mathematics
Office SAS 3236
Box 8205
RALEIGH, NC 27695-8205
USA
Tel. +1 919 515 7321
e-mail: lvbocci@ncsu.edu

WG 7.3 - Computer System Modeling

est. 1973

Chair
Dr. Mark S. SQUILLANTE
Mathematical Sciences Dept.
IBM Thomas J. Watson
Research Center
1101 Kitchawan Road
YORKTOWN HEIGHTS, NY 10598
USA
Tel. +1 914 945 3360
Fax +1 914 945 3434
e-mail: mss@us.ibm.com

Vice-Chair
Prof. Sem BORST
Eindhoven University of Technology
Department of Mathematics & Computer Science
P.O. Box 513
NL-5600 MB EINDHOVEN
The Netherlands
Tel. +31 40 247 5105
Fax +31 40 246 5995
e-mail: sem@win.tue.nl

Secretary
Prof. Benny VAN HOUWDT
University of Antwerp
Dept. of Mathematics and Computer Science
Middelheimlaan 1
BE-2020 ANTWERPEN
Belgium
Tel. +32 3 265 3891
Fax +32 3 265 3777
e-mail: benny.vanhoudt@uantwerpen.be

AT Günter Haring
BE Pierre-Jacques Courtois
BE Dieter Friets
BE Guy Latouche
BE Marie-Ange Rémiche
BE Virgilio Almeida
BR Edmundo de Souza e Silva

GB Isi Mitran
HU Matyas Arato
IL Uri Yechiali
IN Anurag Kumar
IT Marco Ajmone Marsan
IT Gianfranco Balbo
IT Maria Carla Calzarossa

ES Eduardo Casas
ES Jesus Díaz
ES Luis Fernandez
FR Mailine Bergounioux
FR Noel Bonneuil
FR John Cagnol
FR Paola Goatin
FR Jaques Henry
FR Stéphane Labbé
FR Jean-Pierre Raymond
FR Jacques-Alexandre Sepulchre
FR Jan Sokolowski
FR Giovanna Tissioni
FR Judith Vancostenoble
FR Jean-Pierre Yvon
FR Jean Paul Zolesio
IT Francesca Bucci
IT Giuseppe da Prato

NL Ruth Curtain
ES Luciano Pandolfi
PL Ngoc Thanh Nguyen
RU Dan Tiba
RU Alexander Kurzhanski
RU Vyacheslav Maksimov
TN Jariel Ferchichi
UA Igor Chueshov
US Matthias Eller
US Roland Glowinski
US Giovanna Guidoboni
US William Hager
US Alexander Khapalov
US Irena Lasiecka
US Umberto Mosco
US Seenith Sivasundaram
US Daniel Toundykov

AT Amjad Tuffaha
AT Michael Hintermueller
AT Wolfgang Ring
CA Michael C. Delfour
CA André Fortin
CA Robert Owens
CN Jiongmin Yong
DE Michael Hinze
DE Karl-Heinz Hoffman
DE Werner Krabs
DE Antoine Laurain
DE Günter Leugering
DE Arnd Rösch
DE Jürgen Sprekels
DE Fredi Tröltzsch
DE Michael Ulbrich
DE Stefan Ulbrich
ES Alfredo Bermúdez

IT Luciano Pandolfi
IT Eduard Casas
IT Jesus Díaz
IT Luis Fernandez
IT Mailine Bergounioux
IT Noel Bonneuil
IT John Cagnol
IT Paola Goatin
IT Jaques Henry
IT Stéphane Labbé
IT Jean-Pierre Raymond
IT Jacques-Alexandre Sepulchre
IT Jan Sokolowski
IT Giovanna Tissioni
IT Judith Vancostenoble
IT Jean-Pierre Yvon
IT Jean Paul Zolesio
IT Francesca Bucci
IT Giuseppe da Prato

GB Isi Mitran
HU Matyas Arato
IL Uri Yechiali
IN Anurag Kumar
IT Marco Ajmone Marsan
IT Gianfranco Balbo
IT Maria Carla Calzarossa

US Leana Golubchik
US Albert G. Greenberg
US Mor Harchol-Balter
US Philip Heidelberger
US Micha Hofri
US Hisashi Kobayashi
US Yaakov Kogan
WG 7.4 - Inverse Problems and Imaging
est. 2014

Chair
Prof. Dr. Christian CLASON
Universität Duisburg-Essen
Fakultät für Mathematik
Thea-Leymann-Str. 9
DE-45127 ESSEN
Germany
Tel. +49 201 183 7419
Fax +49 201 183 7420
e-mail: christian.clason@uni-due.de

Vice-Chair
Prof. Dr. Antonin CHAMBOLLE
CMAP
Ecole Polytechnique CNRS
Route de Saclay
FR-91128 PALAISEAU Cedex
France
Tel. +33 1 69 33 46 19
Fax +33 1 69 33 46 46
e-mail : antonin.chambolle
@cmap.polytechnique.fr

Secretary
Prof. Dr. Barbara KALTENBACHER
Alpen-Adria-Universität
Institut für Mathematik
Universitätsstr. 65 - 67
AT-9020 KLAGENFURT
Austria
Tel. +43 463 2700 3120
Fax +43 463 2700 993120
e-mail: barbara.kaltenbacher@uni-klu.ac.at
WG 7.5 - Reliability and Optimization of Structural Systems
est. 1986

Chair
Prof. Dr. Daniel STRAUB
TU München
FB Risikoanalyse
Theresienstr. 90
DE-80333 MÜNCHEN
Germany
Tel. +49 89 289 23051
e-mail: straub@tum.de

Co-Chair
Prof. Matteo POZZI
Civil & Environmental Eng.
Carnegie Mellon University
5000 Forbes Ave.
111 Porter Hall
PITTSBURGH, PA 15213-3890
USA
Tel. +1 412 268 5649
Fax +1 412 268 7813
e-mail: mpozzi@cmu.edu

AU R.E. Melchers
CA Marc A. Maes
CA Mahesh D. Pandey
CN W. Tang
DE Christian Bucher
DE Kurt Marti
DE Rüdiger Rackwitz
DK O Ditlevsen
DK John Dalsgaard Sorensen
DK Niels Jacob Tarp-Johansen
DK Palle Thoft-Christensen
ES Juan R. Casas Rius
FR M. Lemaire
FR Bruno Sudret
GB Navil Shetty
IT G. Augusti
IT Fabio Biondini
IT A. Bori

IT Marcello Ciampoli
IT M. Gioffre
JP M. Dogaki
JP Hitoshi Furuta
JP H. Ishikawa
JP Mitsuo Kawatani
JP Chul-Woo Kim
JP Nozumo Kogiso
JP Y. Murotsu
JP Tadanobu Sato
JP M. Sakano
JP Watura Shiraki
JP Yan-Gang Zhao
KR H. N. Cho
KR Junho Song
MX Luis Esteva
NL Jan M. van Noortwijk
NL P. Waarts
PL Stefan Jendo
PL P. Sniady
PL Zbigniew Zembaty
PT C. Guedes Soares
US Alfredo H. Ang
US C. Allin Cornell
US Ross Corotis
US Dan Frangopol
US Armen Der Kiureghian
US H. Ellis
US Gongkang Fu
US Philippe Geyskens
US Mircea D. Grigoriu
US Andy S. Nowak
US Johannes O. Royset
US Maria Szerszen
US Y. K. Wen
ZA Radoslaw Iwankiewicz

WG 7.6 - Optimization-Based Computer Aided Modeling and Design
est. 1989 rev. 1999

Chair
Prof. Janusz GRANAT
Warsaw University of Techn.
Institute of Control and
Computation Engineering
ul. Nowowiejska 15/19
PL-00 665 WARSAW
Poland
Tel. +48 22 234 76 40
Fax +48 22 825 37 19
e-mail: j.granat@itl.waw.pl

Vice-Chair
Dr. Daniel R. DOLK
Naval Postgraduate School
Information Systems Academic
Group
MONTEREY, CA 93943
USA
Tel. +1 831 656 2260
Fax +1 831 656 3679
e-mail: drdolk@nps.navy.mil

AU Edward Szczepicki
BE H. Ariba
CA Theodor Gabriel Crainic
CA D. Jonescu
DE Manfred Grauer
DE T. Gruenert
DE Herbert Kopfer
DE Hans Jürgen Sebastian
DE Helena Szczepicki

DE S. Voss
DE Wolfgang S. Wittig
FR Y. Hamam
IN K.V. Ramani
JP M. Gen
JP Yoshiteru Nakamori
JP Milan Vlach
LB Khalil S. Hindi
LB M. Salameh
LT A. Zilinskas
NL Adrie J.M. Beulens
PL M. Makowski
PL C. Orłowski
PL Toczylowski
PT Andrzej Wierzbicki
PT José Antonio V. Oliveira
US Alexander Bordetsky
US T. Bui
WG 7.7 - Stochastic Optimization

est. 1989
URL: http://www.stoch.net/ifip_wg7_7.htm

Chair
Prof. Kurt MARTI
Federal Armed Forces Univ.
Munich
Aero-Space Eng. & Techn.
Werner Heisenberg-Weg 39
DE-85577 NEUBIBERG
Germany
Tel. +49 89 6004 2541 2560
Fax +49 89 6004 4092 3560

Chair
Prof. Kurt MARTI
Federal Armed Forces Univ.
Munich
Aero-Space Eng. & Techn.
Werner Heisenberg-Weg 39
DE-85577 NEUBIBERG
Germany
Tel. +49 89 6004 2541 2560
Fax +49 89 6004 4092 3560
e-mail:
kurt.marti@unibw-muenchen.de

AT Yuri Ermoliev IT Wolfgang J. Runggaldier NZ Andrew B. Philpott
BE Francois Louveaux LT Jonas Mockus RU Vadim Iosifovich Arkin
CH Karl Frauendorfer NL W.K. Klein Haneveld US John R. Birge
CZ Tomas Cipra NO Maarten H. van der Vlerk US Andras Prekopa
DE Werner Römisch NO Sjur D. Flam US Stephen M. Robinson
GB Michal A. H. Dempster NO Alexei Gaivoronski US Roger J.-B. Wets
TC 8 - Information Systems

est. 1976, revised 1990
URL: http://ifiptc8.dsi.uminho.pt/

Chair
Prof. George M. KASPER, US
Virginia Commonwealth University
School of Business
Department of Information Systems, Snead Hall
301 W. Main Street
RICHMOND, VA 2384-4000
USA
Tel. +1 804 827 0819
Fax +1 804 828 3199
e-mail: gmkasper@vcu.edu

Vice-Chair
Prof. John KROGSTIE, NO
IDI, NTNU
Sem Sælandsvei 7-9
NO-7030 TRONDHEIM
Norway
Tel. +47 73 59 36 77
Fax +47 73 59 44 66
e-mail: krogstie@idi.ntnu.no

Secretary
Prof. Isabel RAMOS, PT
Universidade do Minho
Escola de Engenharia
Departamento de Sistemas de Informação
Campus de Azurém
PT-4800 058 GUIARAES
Portugal
Tel. +351 253 510317
Fax +351 253 510300
e-mail: iramos@dsi.uminho.pt

Chair
Dr. Jolita RALYTE
Université de Genève
Centre Universitaire d'Informatique – CUI
Batelle - bâtiment A
7, route de Drize
CH-1227 CAROUGE
Switzerland
Tel. +41 22 379 02 45
Fax +41 22 379 02 33
e-mail: jolita.ralyte@unige.ch

Vice-Chair
Prof. Janis STIRNA
Stockholm University
Department of Computer and Systems Sciences/DSV
Postbox 7003
SE-164 07 KISTA
Sweden
Tel. +46 8 16 41 99
e-mail: js@dsv.su.se

Secretary
Prof. John KROGSTIE
IDI, NTNU
Sem Sælandsvei 7-9
NO-7030 TRONDHEIM
Norway
Tel. +47 73 59 36 77
Fax +47 73 59 44 66
e-mail: krogstie@idi.ntnu.no

ex-officio members: WG Chairs
* Expert member

WG 8.1 - Design and Evaluation of Information Systems

est. 1976, revised 1990, 1992
URL: http://research.idi.ntnu.no/ifip-wg81/

Chair
Dr. Jolita RALYTE
Université de Genève
Centre Universitaire d'Informatique – CUI
Batelle - bâtiment A
7, route de Drize
CH-1227 CAROUGE
Switzerland
Tel. +41 22 379 02 45
Fax +41 22 379 02 33
e-mail: jolita.ralyte@unige.ch

Vice-Chair
Prof. Janis STIRNA
Stockholm University
Department of Computer and Systems Sciences/DSV
Postbox 7003
SE-164 07 KISTA
Sweden
Tel. +46 8 16 41 99
e-mail: js@dsv.su.se

Secretary
Prof. John KROGSTIE
IDI, NTNU
Sem Sælandsvei 7-9
NO-7030 TRONDHEIM
Norway
Tel. +47 73 59 36 77
Fax +47 73 59 44 66
e-mail: krogstie@idi.ntnu.no

ex-officio members: WG Chairs
* Expert member
WG 8.2 - The Interaction of Information Systems and the Organization

est. 1977     Aims and Scopes
URL: http://www.ifipwg82.org

Chair
Prof. Ulrike SCHULTZE
Southern Methodist University
ITOM, Cox School of Business
PO Box 750333
DALLAS, TX 75275-0333
USA
Tel. +1 214 768 4265
Fax +1 214 768 4099
e-mail: uschultz@smu.edu

Vice-Chair
Dr. Eija Helena KARSTEN
Abo Akademi
School of Business and Economics Information Systems
Henrikkinkatu 7
FI-20500 TURKU
Finland
Tel. +358 2 215 3373
e-mail: eija.karsten@abo.fi

Secretary
Dr. Catherine MIDDLETON
Ryerson University
School of ITM
350 Victoria Street
TORONTO, ON M5B 2K3
Canada
Tel. +1 416 979-5000
e-mail: catherine.middleton@ryerson.ca

Dr. Matthew JONES
University of Cambridge
Cambridge Judge Bus.School
Trumpington Street
CAMBRIDGE CB2 1AG
United Kingdom
Tel. +44 1223 338188
Fax +44 1223 339701
e-mail:m.jones@jbs.cam.ac.uk

AU Deborah Bunker
GB Ela Klecun

AU John Campbell
GB Frank F. Land

AU Dubravka Cevc-Gecmanovic
GB Jonathan Liebenau

AU Donald Falconer
GB Ben Light

AU Walter D. Fernandez
GB Stephen E. Little

AU Pat Finnegan
GB Kathy McGrath

AU Bernard C. Glasson
GB Tom McMaster

AU Wil van der Aalst
NL Gerard Wijers

AU Shang Gao

AU Andreas L. Opdahl

AU Sobah Abbas Petersen

AU Guttorm Sindre

AU Arne Solvberg

AU John Grundy

AU Sergio Guerreiro

AU Pär J. Ågerfalk

AU Ilia Bider

AU Janis Bubenko

AU Mathias Ekstedt

AU Remigijus Gustas

AU Paul Johannesson

AU Fredrik Karlsson

AU Eva Lindencrona-Ohlin

AU Mats Lundeberg

AU Anne Persson

AU Ulf Seinenroth

AU Bernt Wangler

AU Jelena Zdralevic

AU Akhilesh Bajaj

AU Richard Baskerville

AU John Erikson

AU Terry Halpin

AU Fiona Fui-Hoon Nah

AU Sudha Ram

AU Keng Siau

AU Tony Wasserman

AU Tony Wasserman

AU Graham McLeod
<table>
<thead>
<tr>
<th>Country</th>
<th>First Name</th>
<th>Last Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>GB</td>
<td>Nathalie Mitev</td>
<td>US</td>
</tr>
<tr>
<td>GB</td>
<td>Joe Nandhakumar</td>
<td>US</td>
</tr>
<tr>
<td>GB</td>
<td>Michael Newman</td>
<td>US</td>
</tr>
<tr>
<td>GB</td>
<td>Briny Oates</td>
<td>US</td>
</tr>
<tr>
<td>GB</td>
<td>Niki Panteli</td>
<td>US</td>
</tr>
<tr>
<td>GB</td>
<td>Natasha Papazafeiropoulou</td>
<td>US</td>
</tr>
<tr>
<td>GB</td>
<td>Philip Powell</td>
<td>US</td>
</tr>
<tr>
<td>GB</td>
<td>Kostas Samiotis</td>
<td>US</td>
</tr>
<tr>
<td>GB</td>
<td>Chris Sauer</td>
<td>US</td>
</tr>
<tr>
<td>GB</td>
<td>Chris Smart</td>
<td>US</td>
</tr>
<tr>
<td>GB</td>
<td>Steve Smithson</td>
<td>US</td>
</tr>
<tr>
<td>GB</td>
<td>Geoff Walsham</td>
<td>US</td>
</tr>
<tr>
<td>GB</td>
<td>Bernd Stahl</td>
<td>US</td>
</tr>
<tr>
<td>GB</td>
<td>Will Venters</td>
<td>US</td>
</tr>
<tr>
<td>GB</td>
<td>Richard Vigen</td>
<td>US</td>
</tr>
<tr>
<td>GB</td>
<td>Geoff Sorensen</td>
<td>US</td>
</tr>
<tr>
<td>GB</td>
<td>Edgar Whitley</td>
<td>US</td>
</tr>
<tr>
<td>GB</td>
<td>David Wilson</td>
<td>US</td>
</tr>
<tr>
<td>GR</td>
<td>Nancy Pouloudi</td>
<td>US</td>
</tr>
<tr>
<td>GR</td>
<td>Angeliki Poulymenakou</td>
<td>GR</td>
</tr>
<tr>
<td>GR</td>
<td>Pamela Abbott</td>
<td>US</td>
</tr>
<tr>
<td>GR</td>
<td>Tom Butler</td>
<td>US</td>
</tr>
<tr>
<td>GR</td>
<td>Kieran Conboy</td>
<td>US</td>
</tr>
<tr>
<td>GR</td>
<td>Joseph Feller</td>
<td>US</td>
</tr>
<tr>
<td>GR</td>
<td>Brian Fitzgerald</td>
<td>US</td>
</tr>
<tr>
<td>GR</td>
<td>Semas Kelly</td>
<td>US</td>
</tr>
<tr>
<td>GR</td>
<td>Lorraine Morgan</td>
<td>US</td>
</tr>
<tr>
<td>GR</td>
<td>Gad Ariav</td>
<td>US</td>
</tr>
<tr>
<td>GR</td>
<td>Nitzia Geri</td>
<td>US</td>
</tr>
<tr>
<td>GR</td>
<td>Glad Ravid</td>
<td>US</td>
</tr>
<tr>
<td>GR</td>
<td>Kranti Toraskar</td>
<td>US</td>
</tr>
<tr>
<td>GR</td>
<td>Jide Awe</td>
<td>US</td>
</tr>
<tr>
<td>GR</td>
<td>Theo Bemelmann</td>
<td>US</td>
</tr>
<tr>
<td>GR</td>
<td>Ellen Christiaanse</td>
<td>US</td>
</tr>
<tr>
<td>GR</td>
<td>Jules Aars</td>
<td>US</td>
</tr>
<tr>
<td>GR</td>
<td>Chiara Frigerio</td>
<td>US</td>
</tr>
<tr>
<td>GR</td>
<td>Federico Rajola</td>
<td>US</td>
</tr>
<tr>
<td>GR</td>
<td>Yoshiaki Fukami</td>
<td>US</td>
</tr>
<tr>
<td>GR</td>
<td>Satsuya Uchiaki</td>
<td>US</td>
</tr>
<tr>
<td>GR</td>
<td>Tetsuya Uchiaki</td>
<td>US</td>
</tr>
<tr>
<td>GR</td>
<td>Hans Juergen Oppelland</td>
<td>NL</td>
</tr>
<tr>
<td>GR</td>
<td>Theo Bemelmann</td>
<td>US</td>
</tr>
<tr>
<td>GR</td>
<td>Ellen Christiaanse</td>
<td>US</td>
</tr>
<tr>
<td>GR</td>
<td>Ugur Eserel</td>
<td>US</td>
</tr>
<tr>
<td>GR</td>
<td>Fred J. Heemstra</td>
<td>US</td>
</tr>
<tr>
<td>GR</td>
<td>Kuldeep Kumar</td>
<td>US</td>
</tr>
<tr>
<td>GR</td>
<td>Rob Kusters</td>
<td>US</td>
</tr>
<tr>
<td>GR</td>
<td>Hans Juergen Oppelland</td>
<td>NL</td>
</tr>
<tr>
<td>GR</td>
<td>Margunn Aanestad</td>
<td>US</td>
</tr>
<tr>
<td>GR</td>
<td>Kristin Braa</td>
<td>US</td>
</tr>
<tr>
<td>GR</td>
<td>Ole Hanseth</td>
<td>US</td>
</tr>
<tr>
<td>GR</td>
<td>Riita Hellman</td>
<td>US</td>
</tr>
<tr>
<td>GR</td>
<td>Edoardo Jacucci</td>
<td>US</td>
</tr>
<tr>
<td>GR</td>
<td>Jens Kaasboll</td>
<td>US</td>
</tr>
<tr>
<td>GR</td>
<td>Trond Knudsen</td>
<td>US</td>
</tr>
<tr>
<td>GR</td>
<td>Tor Larsen</td>
<td>US</td>
</tr>
<tr>
<td>GR</td>
<td>Knut Rolland</td>
<td>US</td>
</tr>
<tr>
<td>GR</td>
<td>Elisabeth Rosser</td>
<td>US</td>
</tr>
<tr>
<td>GR</td>
<td>Bill Doolin</td>
<td>US</td>
</tr>
<tr>
<td>GR</td>
<td>Michael Myers</td>
<td>US</td>
</tr>
<tr>
<td>GR</td>
<td>Tiure Tuunanen</td>
<td>US</td>
</tr>
<tr>
<td>GR</td>
<td>Cathy Urquhart</td>
<td>US</td>
</tr>
<tr>
<td>PT</td>
<td>Isabel Ramos</td>
<td>US</td>
</tr>
<tr>
<td>SE</td>
<td>Magnus Andersson</td>
<td>US</td>
</tr>
<tr>
<td>SE</td>
<td>Pär J. Agerfalk</td>
<td>SE</td>
</tr>
<tr>
<td>SE</td>
<td>Ola Henriksson</td>
<td>US</td>
</tr>
<tr>
<td>SE</td>
<td>Helena Helstrom</td>
<td>US</td>
</tr>
<tr>
<td>SE</td>
<td>Mikael Lind</td>
<td>US</td>
</tr>
<tr>
<td>SE</td>
<td>Rikard Lindgren</td>
<td>SE</td>
</tr>
<tr>
<td>SE</td>
<td>Bjorn Lundell</td>
<td>SE</td>
</tr>
<tr>
<td>SE</td>
<td>Magnus Mähring</td>
<td>US</td>
</tr>
<tr>
<td>SE</td>
<td>Björn Lundell</td>
<td>SE</td>
</tr>
<tr>
<td>SE</td>
<td>Magnus Mähring</td>
<td>US</td>
</tr>
</tbody>
</table>
WG 8.3 - Decision Support Systems

est. 1981
URL: www.ifip-dss.org

Chair
Dr. Frédéric ADAM
University College Cork
Dept. of Accounting, Finance and Information Systems
O’Rahilly Building
CORK
Ireland
Tel. +353 21 90 33 43
Fax +353 21 27 15 66
e-mail: fadam@afis.ucc.ie

Vice-Chairs
Prof. Frada BURSTEIN
Monash University
Faculty of Information Technology
School of IMS
P. O. Box 197
CAULFIELD EAST 3145
Australia
Tel. +61 3 9903 2011
Fax +61 3 9903 1077
e-mail: frada.burstein@infotech.monash.edu.au

Secretary
Prof. Gloria PHILLIPS-WREN
Loyola University Maryland
Sellinger School of Business
4501 N. Charles Street
Sellinger Hall 314
BALTIMORE, MD 21210
USA
Tel. +1 410 617 5470
Fax +1 410 617 2006
e-mail: gwren@loyola.edu

Dr. Ana Luisa RESPICIO
Universidade de Lisboa
Faculdade de Informatica
Bloco C6 – Piso 3
1749-016 LISBOA
Portugal
Tel. +351 21 7500522
Fax +351 21 7500846
e-mail: respicio@di.fc.ul.pt

GB Tony Cornford
SE ATE Hakan Nilsson
US Judy Wynkoop
GB Mike Cushman
SE Hans-Erik Nissen
US Donald Wynn
GB Elisabeth Davenport
SE Annakarin Nyberg
US Eleanor W. Wynn
GB Guy Fitzgerald
SE Carl Magnus Olsson
US Youngjin Yoo
GB Anita Greenhill
SE Birger Rapp
US Robert W. Zmud
GB Christopher Lemingway
SG Shan Pan
ZA Walter Baets
GB Ian Hosein
SI Joze Grigar
ZA Brian O’Donovan
GB Debra Howcroft
TW Tsai-hsin Chu
ZA Louise Whittaker
GB Lucas D. Introna

AT Fatima Dargam
FR Frantz Rowe
IT Maria Franca Norese
AT Thomas Madritsch
FR Ines Saad
IT Marius-Octavian Olaru
AT Rudolf Vetschera
FR Maryse Salles
IT Massimiliano Picconi
AU Brooke Abraham
FR Noria Taghezout
IT Luciano Polinari
AU David Arnett
FR Catherine Tessier
IT Gito Davide Salvatore
AU Fadi Bdeir
FR Cecilia Zanni
IT Saverino Vernetamo
AU Emilia Bellucci
FR Pascale Zarate
IL Tsipi Heart
AU John Betts
GB Dina Berkeley
JP Yasuaki Kobashi
AU Aileen Cater-Steel
GB Wendy Currie
KR Namho Chung
AU Dubravka Cecé-Kecmanovic
GB Victor Dörfler
KR Jin Sung Kim
AU Wai Ling Cheung
GB Alejandra Duenas
KW Khaled Al-Reshad
AU Leonid Churilov
GB John Edwards
LT Rimvydas Skyriris
AU Linda Dawson
GB Lucia Garcia
LU Ralf Hoben
AU Suelette Dreyfus
GB Viviane Goldenberg
MX Olivier Parisot
AU Patrick Finnegan
GB Luis Gomes
MX Manuel Mora
AU Andrew Flitman
GB Patrick Humphreys
MX Pablo Antonio Vidales
AU Dale Gartshore
GB Miguel Imas
MY Ahmad Faiz
AU Marcus Gibson
GB Gareth Jones
MY Rosmayati Mohemad
AU Bernard C. Glasson
GB Vicky Katsioloudes
MY Noor Maizura Mohamed Noor
AU Pari Delir Haghighi
GB Shaofeng Liu
NG Nosa Isere
AU Jafar Hamra
GB Carol Lorac
NL Mehmet Aydin
AU Helen Hasan
GB Bill Mayon-White
NL G.D.H. Claassen
AU Gregory Hill
GB Andrew McCoish
NL Henk Gazendam
AU Liqinliu Hossain
GB Jonathan Moizer
NL Gerard de Zeeuw
AU Ilona Jagielska
GB Sevasti-Melissa Nolas
NL Ronald M. Lee
WG 8.4 - E-Business Information Systems: Multi-disciplinary research and practice
est. 1986, prov. revised 2001, 2002
URL: http://ifip84.sba-research.org/

Chair
Dr. Edgar WEIPPL
SBA Research gGmbH
Favoritenstrasse 16, 2. Stock
AT-1040 WIEN
Austria
Tel. +43 1 505 36 88
Fax +43 1 505 88 88
e-mail:
eweippl@securityresearch.at

Vice-Chairs
Dr. Wichian CHUTIMASKUL
King Mongkut’s University of Technology Thonburi
School of Information Technology
126 Pracha-U-Thit Rd., Bangmod, Thungkru
TH-BANGKOK 10140
Thailand
Tel. +66 2470 9849
Fax +66 2872 7145
e-mail: wichian@sit.kmutt.ac.th

Secretary
Prof. Isao ECHIZEN
The Graduate University for Advanced Studies (SOKENDAI)
School of Multidisciplinary Science
2-1-2, Hitotsubashi, Chiyoda-Ku, JP-101-8430 TOKYO
Japan
Tel. +81 3 4212 2516
Fax +81 3 4212 2120
e-mail: iechizen@nii.ac.jp

Prof. Günther PERNUL
University of Regensburg
Dept. of Information Systems
Universitatsstrasse 31
DE-93053 REGensburg
Germany
Tel. +49 941 943 2742
Fax +49 941 943 2744
e-mail: guenther.pernul@wwi.uni-regensburg.de

AT  Franz Bayer                         AU  Robert Johnston
AT  Georg Gunther                      AU  Elaine Lawrence
AT  Stefan Jakoubi                     AU  Peter Marshall
AT  Christian Kittl                    AU  Stephen Newton
AT  Thomas Menzel                      AU  Granlus Osborne
AT  Otto Petrovic                      AU  Matthew Simon
AT  Siegfried Reich                    AU  Paula Swatman
AT  Gerald Quirchmayr                 AU  Nilmini Wickramasinghe
AT  A Min Tjoa                        AU  Mary-Anne Williams
AT  Simon Tjoa                         AU  Sue Williams
AT  Roland Traumnüller                BA  Melina Handzic
AT  Alexandra Wagner                   BE  Dirk Deschoolmeester
AT  Carole Alcock                      BG  Svetla Boytcheva
AU  Christian Bauer                   BG  Krassen Stefanov
AU  Derek Binney

AT  Douglas Vogel                     IT  Benedetto Intriglia
IT  Massimo Mecelia
JP  Shinsaku Kiyomoto
JP  Tetsuya Uchiki
KR  Ilsun You                         NG  Jide Awe
NL  Pieter H. Hartel                 NL  D. Arjen Wassenaar
NO  John Krogsie                     NZ  Zlatko J. Kovac
RO  Silvia Avaslicai                 SE  Albin Zuccatoo
TH  Naliniyant Porrawatpreyakorn
TN  Safa Kaabi Chihi
WG 8.5 - Information Systems in Public Administration

est. 1988
URL: http://wg85.iiip.org

Chair
Dr. Hans J. SCHOLL
University of Washington
The Information School
Mary Gates Hall, Suite 370C
Seattle, WA 98195-2840
USA
Tel. +1 206 616 2543
Fax +1 206 616 3152
e-mail: jscholl@uw.edu

Vice-Chair
Dr. Marijn JANSSEN
Delft University of Technology
Faculty of Technology, Policy and Management
P.O. Box 5015
NL-2600 GA Delft
The Netherlands
Tel. +31 15 278 1140
Fax +31 15 278 3741
e-mail: m.f.w.h.a.janssen@tudelft.nl

Secretary
Dr. Olivier GLASSEY
Inst. de Hautes Etudes en Administration Publique
IDHEAP
Quartier UNIL Mouline
CH-1015 Lausanne
Switzerland
e-mail: olivier.glassey@idheap.unil.ch

AT | Robert Krimmer
   | AT | Gerasimos Dimitriou
   | GR | NL | Henk G. Sol
   | NL |
   | AT | Christine Leitner
   | GR | NL | Yao-Hua Tan
   | NL |
   | AT | Alexander Prosser
   | GR | NL | Sietse Overbeek
   | NL |
   | AT | Peter Reichstädt
   | GR | NL | Tom M. van Engers
   | NL |
   | AT | A Min Tjoa
   | GR | NL | Anne Fleur van Veenstra
   | NL |
   | AT | Roland Traumnüller
   | GR | NL | Radbound Winkels
   | NL |
   | AT | Silke Weiß
   | GR | NL | Anneke Zuidewijk
   | NL |
   | AU | Singara Rao Karan
   | HU | NO | Lasse Bertnen
   | NO |
   | BA | Melinda Handicz
   | IE | NO | Leif Skitlenes Flak
   | NO |
   | BR | Renata Araujo
   | IE | NO | Arild Jansen
   | NO |
   | BR | Luiz Antonio Jola
   | IE | NO | Marius Johannessen
   | NO |
   | BR | Beatriz Lanza
   | IE | NO | Trond Knudsen
   | NO |
   | BR | Gabriel Marcuzzo
   | IN | NO | Carl Erik Moe
   | NO |
   | BR | Nicolau Reinhard
   | IR | NO | Øystein Sæbo
   | NO |
   | CH | Jean-Loup Chappellet
   | IR | NO | Maung K. Sein
   | NO |
   | CH | Christoph Glauser
   | IR | NZ | Hugo Gong
   | NZ |
   | CH | Reinhard Riedl
   | IT | NZ | Miriam Lips
   | NZ |
   | CH | Anastasiya Yurchyshyna
   | IT | OM | Salim Al-Shuaali
   | OM |
   | CL | Mauricio Solar
   | IT | PL | Mariusz Luterek
   | PL |
   | DE | Melanie Bicking
   | IT | PL | Witold Staniszkis
   | PL |
   | DE | Thomas F. Gordon
   | IT | RO | Nicolae Costake
   | RO |
   | DE | Herbert Kubicek
   | IT | RO | Codrin-Florentin Nisioiu
   | RO |
   | DE | Bjorn Niehaves
   | IT | RU | Lydmilla Bershadskaya
   | RU |
   | DE | Ralf Plattfaut
   | IT | RU | Andrei V. Chugnov
   | RU |
   | DE | Melanie Volkamer
   | IT | RU | Dimitri Trutnev
   | RU |
   | DE | Maria Wimmer
   | IT | SA | Ahmed Darwish
   | SA |
   | DK | Helle Zinner Henrikson
   | IN | SE | Karin Arlsson
   | SE |
   | EG | Ralf Klischewski
   | IN | SE | Annetje Ekelin
   | SE |
   | ES | Fernando Galindo
   | JM | SE | Sara Eriksten
   | SE |
   | ES | Pilar Lasala
   | KW | SE | Ake Groenlund
   | SE |
   | FI | Ari-Veikko Anttiroiko
   | LT | SE | Lars Ishamar
   | SE |
   | FI | Ahti Saarenpää
   | LT | SE | Björn Lundell
   | SE |
   | FR | Michel Klein
   | MO | SE | Ulf Melin
   | SE |
   | GB | Haya Almawashi
   | MX | SE | Agneta Ranerup
   | SE |
   | GB | Ali Z. Bigdeli
   | NG | SI | Dalibor Stanimirovic
   | SI |
   | GB | Yogesh Dwivedi
   | NL | SI | Ljupco Todorowski
   | SI |
   | GB | Keith Horton
   | NL | SI | Mirok Vintar
   | SI |
   | GB | Zahir Irani
   | NL | TH | Wichian Chutismaskul
   | TH |
   | GB | Ann Macintosh
   | NL | US | Todd Davies
   | US |
   | GB | T. William Olle
   | NL | US | Sharon Dawes
   | US |
   | GB | Panagiots Panagiotopoulos
   | NL | US | Kenneth L. Kraemer
   | US |
**WG 8.6 - Transfer and Diffusion of Information Technology**

est. 1994
URL: http://ifipwg86.wikidot.com/

**Chair**
Prof. Deborah BUNKER
The University of Sidney Business School
H70 – Abercrombie Bldg.
NSW 2006, Australia
Tel. +61 2 9351 7109
Fax +61 2 9351 7294
email: deborah.bunker@sydney.edu.au

**Vice-Chairs**
Dr. Eleanor WYNN
Research Scholar
Ronin Institute
WEST LINN, OR 97068
USA
e-mail: eleanorwynn3@gmail.com

Prof. David WASTELL
Nottingham University Business School
NOTTINGHAM NG8 1BB
United Kingdom
Tel. +44 115 8467783
e-mail: david.wastell@nottingham.ac.uk

**Secretary**
Dr. Yogesh DWIVEDI
Swansea University
Swansea Univ. Business School
Inf.Sys & E-Business
Singleton Park, Haldane Bldg.
SWANSEA SA2 8PP, Wales
United Kingdom
Tel. +44 1792 259626
e-mail: y.k.dwivedi@swansea.ac.uk

---

AU Bernard C. Glasson
AU L. Dawson
AU Steve Elliot
AU Ahmed Imran
AU Linda Levine
BD Mohammad A. Hossain
CA B. Marcolin
DE A. Gadatsch
DK Ivan Aaen
DK Jan Damsgaard
DK Peter Axel Nielsen
DK Jan Pries-Heje
DK Helle Zinner Henriksen
DK Karhheinz Kautz
DK C. Jeppesen
DK John Stouby Persson
DK Heidi Tscherning
ES Ana Bernardos
ES J.R. Casar
ES Gonzalo Serrano Leon
FI Pasli Kuvaja
FI Kari Leppala

GB Carl Adams
GB Carole Brooke
GB Amary Elbanna
GB E. Ferneley
GB A. Higgens
GB Su-yi Lin
GB Stephen E. Little
GB Tom McMaster
GB N. Papazafeiropoulos
GB Chris Sauer
GB Richard Verryard
GB Richard Vidgen
IE Kieran Conboy
IE Brian Donnellan
IE Brian Fitzgerald
IE Willy Golden
IE L. Morgan
IE Frank Murray
IE C.M. Olsson
NA Tiko Iyamu
NG Jide Awe

NO Kristin Braa
NO Tor Larsen
NO Pal Sorgaard
NZ Michael Myers
SE Birgitta Bergvall-Kareborn
SE Bjorn Johansson
SE H. Linderoth
US J.P. Allen
US Mark Ardis
US Richard Baskerville
US Robert Fichman
US Priscilla Fowler
US Lawrence Lien
US Kalle Lyytinen
US Lars Mathiassen
US Nancy Russo
US A.A. Samaha
US V. Sambamurthy
US Burt Swanson
US Duane Truex
US Robert W. Zmud
WG 8.9 – Enterprise Information Systems

est. 2006
URL: http://ifip89.ifis.tuwien.ac.at

Chair
Prof. A Min TJOA
Vienna University of Technology
Institute of Software Technology
Favoritenstr. 9 -1/188
AT-1040 VIENNA
Austria
Tel. +43 1 5880 18800
Fax +43 1 504 05 32
e-mail: amin@ifip.org

First Vice-Chair (Founding Chair)
Prof. Li Da XU
Old Dominion University
Department of Information Technology and Decision Sciences
2076 Constant Hall
NORFOLK, VA 23529, USA
Tel. +1 757 683 6138
e-mail: lxu@odu.edu

Second Vice-Chair
Prof. Maria RAFFAI
Széchenyi István University
Faculty for Information Science and Electrical Engineering
Egyetem tér 1
HU-9026 GYÖR, Hungary
Tel. +36 96 613 525
Fax +36 96 613 525
e-mail: maria.raffai@gmail.com

First Secretary
Prof. Ling LI
Old Dominion University
Department of Information Technology and Decision Sciences
2064 Constant Hall
NORFOLK, VA 23529
USA
Tel. +1 757 683 6455
Fax +1 757 683 5800
e-mail: lli@odu.edu

Second Secretary
Prof. Sohail CHAUDHRY
Villanova University
Faculty for Operations
VILLANOVA, PA 19085
USA
Tel. +1 610 519 4369
e-mail: sohail.chaudhry@villanova.edu

WG 8.10/6.12/2.14 - Service-Oriented Systems

WG 8.11/11.13 - Information Systems Security Research

est. 2010
URL: http://ifip.byu.edu

Chair
Prof. H. Raghav RAO
University at Buffalo
Mgmt. Science and Systems
School of Management
325C Jacobs Mgmt. Center
BUFFALO, NY 14260-4000
USA
Tel. +1 716 645 3425
e-mail: mgmtrao@gmail.com

Vice-Chair
Dr. Allen JOHNSTON
University of Alabama at Birmingham
Management, Information Systems and Quantitative Methods
School of Business
BIRMINGHAM, AL 35294-4460
USA
Tel. +1 205 934 8870
e-mail: ajohnston@uab.edu

Secretary
Dr. Tejaswini HERATH
Brock University
Dept. of Finance, Operations and Information Systems
Goodman School of Business
500 Glenridge Ave
ST. CATHERINES, ON L2S 3A1
Canada
Tel. +1 905 688 5550 4179
e-mail: therath@brocku.ca
TC 9 - ICT and Society

Chair
Ms. Diane WHITEHOUSE, GB
The Castlegate Consultancy
27 Castlegate
MALTON, YO 17 7DP
North Yorkshire,
United Kingdom

Chair
Dr. William MClVER, Jr. CA
New Brunswick Community
College
284 Smythe Street
FREDERICTON, NB E3B 3C9
Canada

Secretary
Mr. Oliver BURMEISTER, AU
School of Comp. & Mathematics
Charles Sturt University
Locked Bag 588
WAGGA WAGGA,
NSW 2678
Australia

URL: http://ifiptc9.csir.co.za/index.html

Chair
Ms. Diane WHITEHOUSE, GB
The Castlegate Consultancy
27 Castlegate
MALTON, YO 17 7DP
North Yorkshire,
United Kingdom
e-mail: diane.whitehouse@the
castlegateconsultancy.com

Chair
Dr. William MClVER, Jr. CA
New Brunswick Community
College
284 Smythe Street
FREDERICTON, NB E3B 3C9
Canada
e-mail: bill.mciver@nbcc.ca

Secretary
Mr. Oliver BURMEISTER, AU
School of Comp. & Mathematics
Charles Sturt University
Locked Bag 588
WAGGA WAGGA,
NSW 2678
Australia

Tel. +61 2 6933 2591
Fax +61 2 6933 2080
e-mail: oburmeister@csu.edu.au

ex-officio members: WG Chairs
* Expert member

WG 9.1 - Computers and Work

Chair
Prof. Jungwoo LEE
Yonsei University
Graduate School of Information
NMH 412
50 Yonsei Ro
Seodaemun-gu
SEOUl 120-749
Republic of Korea
Tel. +82 2 2123 4526
e-mail: jlee@yonsei.ac.kr

Chair
Prof. Mary Beth WATSON-MANHEIM
Department of Information and
Decision Sciences
Univ. of illinois at Chicago
CHICAGO, Illinois 60607
USA
Tel. +1 312 996 2370
e-mail: mbwm@uic.edu

Secretary
Prof. Dr. Stefan KLEIN
Dept. of Information Systems
Westfälische Wilhelms-Universität
Leonardo-Campus 11
100.028 (028)
DE-48149 MÜNSTER, Germany
Tel. +49 251 83 38111
Fax +49 251 83 38119
e-mail: stefan.klein@uni-
muenster.de

ex-officio members: WG Chairs
* Expert member

WG 9.1 - Computers and Work

Chair
Prof. Jungwoo LEE
Yonsei University
Graduate School of Information
NMH 412
50 Yonsei Ro
Seodaemun-gu
SEOUl 120-749
Republic of Korea
Tel. +82 2 2123 4526
e-mail: jlee@yonsei.ac.kr

Chair
Prof. Mary Beth WATSON-MANHEIM
Department of Information and
Decision Sciences
Univ. of illinois at Chicago
CHICAGO, Illinois 60607
USA
Tel. +1 312 996 2370
e-mail: mbwm@uic.edu

Secretary
Prof. Dr. Stefan KLEIN
Dept. of Information Systems
Westfälische Wilhelms-Universität
Leonardo-Campus 11
100.028 (028)
DE-48149 MÜNSTER, Germany
Tel. +49 251 83 38111
Fax +49 251 83 38119
e-mail: stefan.klein@uni-
muenster.de

ex-officio members: WG Chairs
* Expert member
### Chair
Ms. Diane WHITEHOUSE, GB
The Castlegate Consultancy
27 Castlegate
MALTON, YO 17 7DP
North Yorkshire,
United Kingdom
e-mail: diane.whitehouse@the
castlegateconsultancy.com

### Chair
Ms. Diane WHITEHOUSE, GB
The Castlegate Consultancy
27 Castlegate
MALTON, YO 17 7DP
North Yorkshire,
United Kingdom
e-mail: diane.whitehouse@the
castlegateconsultancy.com

### Vice-Chairs
Mr. Marc VAN LIESHOUT
TNQ Information and Communication Technology
P.O. Box 5050
NL-2600 GB DELFT
The Netherlands
Tel. +31 15 2857125
Fax +31 15 2857382
e-mail: marc.vanlieshout@tno.nl

### Vice-Chairs
Prof. Norberto PATRIGNANI
Università Cattolica di Milano
Largo Gemelli 1
IT-20123 MILANO
Italy
e-mail: norberto.patrignani@unicatt.it

### Vice-Chairs
Prof. Philippe GOIJON
Computer Science Institute
University of Namur (FUNDP)
rue Grandgagnage, 21
BE-5000 NAMUR
Belgium
Tel. +32 81 72 41 08
Fax +32 81 72 49 67
e-mail: philippe.goujon@fundp.ac.be

---

<table>
<thead>
<tr>
<th>AT</th>
<th>Eduard Dundler***</th>
</tr>
</thead>
<tbody>
<tr>
<td>AT</td>
<td>Mersolis Schöne***</td>
</tr>
<tr>
<td>AT</td>
<td>Sarah Speckermann***</td>
</tr>
<tr>
<td>AT</td>
<td>Joel Szonn***</td>
</tr>
<tr>
<td>AU</td>
<td>Mike Bowern**</td>
</tr>
<tr>
<td>AU</td>
<td>Julie Cameron</td>
</tr>
<tr>
<td>AU</td>
<td>Roger Clarke**</td>
</tr>
<tr>
<td>AU</td>
<td>John Martino***</td>
</tr>
<tr>
<td>AU</td>
<td>John Weckert</td>
</tr>
<tr>
<td>BE</td>
<td>Jacques Berleur*</td>
</tr>
<tr>
<td>BE</td>
<td>Marie d'Udekem-Gevers*</td>
</tr>
<tr>
<td>BE</td>
<td>Bernadett Koteles***</td>
</tr>
<tr>
<td>BE</td>
<td>Veronique Laurent**</td>
</tr>
<tr>
<td>BE</td>
<td>Bern Martens</td>
</tr>
<tr>
<td>BE</td>
<td>Laurence Masclet**</td>
</tr>
<tr>
<td>BE</td>
<td>Syed Naqvi***</td>
</tr>
<tr>
<td>BE</td>
<td>John Pearson***</td>
</tr>
<tr>
<td>BE</td>
<td>Jo Pierson***</td>
</tr>
<tr>
<td>BE</td>
<td>Stephen Rainey</td>
</tr>
<tr>
<td>CA</td>
<td>William McIver, Jr.,***</td>
</tr>
<tr>
<td>CA</td>
<td>Richard Rosenbeg*</td>
</tr>
<tr>
<td>CH</td>
<td>Lorenz Hilty***</td>
</tr>
<tr>
<td>CH</td>
<td>Patrick Waeger***</td>
</tr>
<tr>
<td>CO</td>
<td>Rocio Rueda Ortiz***</td>
</tr>
<tr>
<td>DE</td>
<td>Babis Ipektsidis***</td>
</tr>
<tr>
<td>DE</td>
<td>Philip Schuetz***</td>
</tr>
<tr>
<td>ES</td>
<td>Porfiro Baroso Asenjo</td>
</tr>
<tr>
<td>ES</td>
<td>Juana Maria Sancho Gil</td>
</tr>
<tr>
<td>ES</td>
<td>Ramon Puigjaner</td>
</tr>
<tr>
<td>FI</td>
<td>Olli Heimo</td>
</tr>
<tr>
<td>FI</td>
<td>Eija Kaasinen***</td>
</tr>
<tr>
<td>FI</td>
<td>Ville Kainu***</td>
</tr>
<tr>
<td>FI</td>
<td>Kai Kimppa</td>
</tr>
<tr>
<td>FI</td>
<td>Jani Koskinen</td>
</tr>
<tr>
<td>FI</td>
<td>Anne-Marie Tuikka***</td>
</tr>
<tr>
<td>FR</td>
<td>Amelie Bohas***</td>
</tr>
</tbody>
</table>

---

*) Honorary member
**) Associate member
***) Friend
SIG 9.2.2 - Framework on Ethics of Computing

URL: http://www.info.fundp.ac.be/~jbl/IFIP/cadresIFIP.html

Chair
Dr. Penny DUQUENOY
Middlesex University
School of Engineering and
Information Sciences
The Burroughs
LONDON NW4 4BT
United Kingdom
Tel. +44 20 8411 4333
Fax +44 20 8411 6943
e-mail: p.duquenoy@mdx.ac.uk

Vice-Chair
Dr. Kai K. KIMPPA
University of Turku
Dept. of Inf. Technology
FI-20014 Univ. of TURKU
Finland
Tel. +358 2 333 8665
Fax +358 2 333 8600
e-mail: kai.kimppa@utu.fi

AU Mike Bowern
AU Oliver Burmeister
AU Julie Cameron
AU John Weckert
BE Marie d’Udekem-Gevens**
BE Philippe Goujon
BE Veronique Laurent
DE Christina Class
DE Wolfgang Coy
DE Debora Weber-Wulff

ES Portifrio Barros Asenjo
ES Juana M. Sancho Gil
FI Olli Heimo
GB Carlisle E. George
GB Matt Jones
GB T. Richard Sizer
GB Harold Thimbleby
GB Diane Whitehouse
GB Christopher Zielinski
GR Vassilios Laopodis

*) Guests
**) Corresponding member

WG 9.3 - Home Oriented Informatics and Telematics

est. 1988, revised 1989
URL: http://hoit2000.scit.wlv.ac.uk

Chair
Prof. Alladi VENKATESH
University of California
CRITO (Center for Research
on Information Technology)
3200 Berkeley Place
IRVINE, CA 92697
USA
Tel. +1 949 824 1134
Fax +1 949 824 8091
e-mail: avenkate@uci.edu

Vice-Chair
Mrs. Kathy BUCKNER
Napier University
School of Computing
Merchiston Campus
EDINBURGH EH10 5DT
United Kingdom
Tel. +44 131 455 2775

Secretary
Dr. Claire DORMANN
Carleton University
HOT Lab
1125 Colonel By Drive
OTTAWA, ON K1S 5B6
Canada
Tel. +1 613 520 2600 6627
Fax +1 613 520 3667
e-mail:
cdormann@connect.carleton.ca

AU P. Jones
CA Geoff Cragg
DK Kresten Bjerg
DK Marianne Graves Petersen
ES Yves Punie
GB Lynne Baille
GB D. Beynon
GB Leslie Haddon

GB W. Huang
GB D. Lawrence
GB A. Monk
GB Tony Proctor
GB Andy Sloane
GB J. Taylor
HU Andras Galambosi
JP K. Go

NL Berry Eggen
NL Felix van Rijn
NO Richard Ling
SE Gunilla Bradley
SE S. Junestrand
SE Ulf Keijer
SE L. Sturesson
WG 9.4 - Social Implications of Computers in Developing Countries

est. 1989, revised 2007
URL: http://www.ifipwg94.org

Chair
Prof. Maung K. SEIN
University of Agder
Dept. of Information Systems
Faculty of Economics and Social Sciences
Servis Boks 422
NO-4604 KRISTIANSAND
Norway
Tel. +47 3814 1617
Fax +47 3814 1029
e-mail: maung.k.sein@uia.no

Vice-Chairs
for African Region:
Dr. Jonathan MILLER
Miller Esselaar & Associates
P O Box 26138
ZA-HOUT BAY 7872
South Africa
Tel. +27 21 790 1327
Fax +27 21 790 1327
e-mail: jonmil@icon.co.za

for Asian Region:
Dr. Roger W. HARRIS
5/B Angel Court
Ville de Cascade
No. 2 Lai Wo Lane
Shatin, New Territories
HONG KONG, China
e-mail: roger.harris@rogharris.org

for Latin America:
Prof. Renata La ROVERE
Universidade Federal do Rio de Janeiro
Instituto de Economia
Avenue Pasteur 250
BR-22290-240 RIO DE JANEIRO,
Brazil
Fax +55 21 541 8148
e-mail: rena@ie.ufrj.br

Secretary
Dr. Arlene BAILEY
The University of the West Indies
Dept. of Sociology, Psychology and Social Work
JM-MONA
Jamaica
Tel. +1876 977 0646 3309
Fax +1876 977 9301
e-mail: arlene.bailey@uwimona.edu.jm

AE Fadi Salem
AL Neki Frasher
AR Manuel Acevedo
AU Atma Ram Ghimire
AU Helena Grunfeld
AU Graeme Johanson
AU Donna Vaughan
BB Stewart Bishop
BD M. Abdul Kashem
BD AHM Bazlur Rahman
BD Annajrat Rasel
BD Sujoy Kumer Sharma
BE Jacques Berleur
BE Alain Pirotte
BR Miguel Juan Bacid
BR José Muniz da Costa Vargens
BR Cesar Alexandre de Souza
BR Leila Humes
BR Marie Anne Macadar
BR Nicoiu Reinhard
BR Jacques Wainer
BR Ingrid Winkler
BR Athishulang Mutshewa
CA Clive Gobin
CA Gerald Grant
CA Liz Peloso
CH Ramesh S. Krishnamurthy
CL Ricardo Baeza-Yates
CN Robert Davison
DE Jorg Meyer-Stamer
DE Norman Schräpel
GB Richard Heeks
GB Roshendra Khadka
GB Grace Kite
GB Aygen Kurt-Dickson
GB Frank K. Land
GB Boyi Li
GB John Lindsay
GB Liezel Longboan
GB Shirin Madon
GB Miriam W. Mukasa
GB Brian Nicholson
GB Geoff Walsham
GB Chris Westrup
GB Yingqin Zheng
GE Kakha Nadiradze
GH Hassan Hamadu
GH Kweku Koranteng
GR Somya Joshi
IE Elaine Byrne
IE Roy H.W. Johnston
IN Subhash C. Bhatnagar
IN V.P. Galati
IN Mukesh Hajela
IN Vignesh Ilavarasan
IN Rekha Jain
IN Trishanjit Kaur
IN Praveen Kumar
IN P V S Kumar
IN D.P. Prathap
IN Nimmis Rangaswamy
IN Kasina Venkateshwar Rao
GB Richard Heeks
GB Roshendra Khadka
GB Grace Kite
GB Aygen Kurt-Dickson
GB Frank K. Land
GB Boyi Li
GB John Lindsay
GB Liezel Longboan
GB Shirin Madon
GB Miriam W. Mukasa
GB Brian Nicholson
GB Geoff Walsham
GB Chris Westrup
GB Yingqin Zheng
GE Kakha Nadiradze
GH Hassan Hamadu
GH Kweku Koranteng
GR Somya Joshi
IE Elaine Byrne
IE Roy H.W. Johnston
IN Subhash C. Bhatnagar
IN V.P. Galati
IN Mukesh Hajela
IN Vignesh Ilavarasan
IN Rekha Jain
IN Trishanjit Kaur
IN Praveen Kumar
IN P V S Kumar
IN D.P. Prathap
IN Nimmis Rangaswamy
IN Kasina Venkateshwar Rao
NL Gianluca Miscione
NO Jorn Braa
NO Bjørn Furuholt
NO Jens Kaasbøll
NO Lars T. Sofstad
NO Ranendra Adhikari
NO Reg Bahadur Bhandari
NO Pat Hall
NO Pragya Khatiwada
NO Hemal Shrestha
NZ Sharad Babu Shrestha
NZ Antonio Diaz Andrade
NZ Felix B. Tan
NZ Ranjan Vaidya
PH Ronald Vyhmeister
SE Elly Amani Gamukama
SE M. Srajul Islam
SE Florence Kivunike
SE Per Lind
SE Gudrun Wicander
TG Mohammed L. Mansaray
TH Krisana Kitayadisai
TH Juma Lungo
TZ Hector Mongi
TZ Faith Shayo
UG Nora Mulira
US Abiodun Bada
This list of members comprises those who have signed up at www.ifipwg94.org. Some members, those who have chosen not to provide full personal information, are not included here. The working group has established a 17 member board working to develop events and activities around the globe.

The IFIP Working Group 9.4 on the Social Implications of Computers in Developing Countries invites seek to involve members from the global south who may not always be able to attend IFIP events in person. They encourage those interested in their work to sign up through their web site www.ifipwg94.org.

WG 9.5 – Virtuality and Society

URL: http://www.ifip95wg.org

**Chair**
Dr. David KREPS
University of Salford
Salford Business School
Maxwell 511f
SALFORD
Greater Manchester M5 4WT
United Kingdom
Tel. +44 161 295 5884
e-mail: d.g.kreps@salford.ac.uk

**Vice-Chair**
Dr. Marie GRIFFITHS
University of Salford
Salford Business School
Room 325, Maxwell Building
SALFORD
Greater Manchester M5 4WT
United Kingdom
Tel. +44 161 295 4237
e-mail: m.griffiths@salford.ac.uk

**Secretary**
Dr. Petros CHAMAKIOTIS
School of Business, Management and Economics
University of Sussex
Jubilee 211
BRIGHTON, BN1 9SL
United Kingdom
e-mail: p.chamakiotis@sussex.ac.uk
### WG 9.6/11.7 - Information Technology: Misuse and the Law

**Chair:**
Prof. Ronald LEENES  
Tilburg University  
TILT - Tilburg Institute for Law, Technology, and Society  
P.O. Box 90153  
NL-5000 LE TILBURG  
The Netherlands  
Tel. +31 13 466 3655  
Fax +31 13 466 3750  
e-mail: r.e.leenes@uvt.nl

**Vice Chair:**
Dr. Eleni KOSTA  
Tilburg University  
TILT - Tilburg Institute for Law, Technology, and Society  
P.O. Box 90153  
NL-5000 LE TILBURG  
The Netherlands  
Tel. +31 13 466 4001  
e-mail: e.kosta@tilburguniversity.edu

**Secretary:**
Mr. Gunnar WENNGREN  
SENIOR Consult  
AB Wenngrens i Linköping  
Sörebroda  
SE-590 52 NYKIL  
Sweden  
Tel. +46 13 33 30 48  
e-mail: gunwe@telia.com

---

### WG 9.7 - History of Computing

**Chair:**
Dr. Christopher LESLIE  
New York University  
Tandon School of Engineering  
6 Metro Tech Center  
BROOKLYN, NY 11201  
USA  
Tel. +1 718 260 3130  
e-mail: chris.leslie@nyu.edu

**Vice Chair:**
Dr. Martin SCHMITT  
Centre for Contemporary History  
Am Neuen Markt 1  
DE-14467 POTSDAM  
GERMANY  
Tel. +49 331 74510-119  
Fax +49 331 74510-143  
e-mail: schmitt@zzf-pdm.de

**Secretary:**
TBD

---

**Participants:**

<table>
<thead>
<tr>
<th>Country</th>
<th>Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>AU</td>
<td>Olujoke Akindemowo</td>
</tr>
<tr>
<td>AU</td>
<td>Philip Argy</td>
</tr>
<tr>
<td>AU</td>
<td>Roger Clarke</td>
</tr>
<tr>
<td>AU</td>
<td>Andrew Freeman</td>
</tr>
<tr>
<td>AU</td>
<td>Anthony Willis</td>
</tr>
<tr>
<td>AT</td>
<td>Martin Latzenhofer</td>
</tr>
<tr>
<td>BE</td>
<td>Biekje Spruyt</td>
</tr>
<tr>
<td>BG</td>
<td>Nelly Ognyanova</td>
</tr>
<tr>
<td>CH</td>
<td>Beat Lehmann</td>
</tr>
<tr>
<td>CZ</td>
<td>Dagmar Brecherlova</td>
</tr>
<tr>
<td>CZ</td>
<td>Cestmir Halbian</td>
</tr>
<tr>
<td>DE</td>
<td>Arslan Broemmke</td>
</tr>
<tr>
<td>DE</td>
<td>Kai Rannenberg</td>
</tr>
<tr>
<td>DE</td>
<td>Kathrin Schier</td>
</tr>
<tr>
<td>ES</td>
<td>Jorge Davila Muro</td>
</tr>
<tr>
<td>ES</td>
<td>Francisco Javier Lopez-Munoz</td>
</tr>
<tr>
<td>ES</td>
<td>Judit Valdivia</td>
</tr>
<tr>
<td>FR</td>
<td>Philippe Le Clech</td>
</tr>
<tr>
<td>FR</td>
<td>Hubert Marty-Vrayment</td>
</tr>
<tr>
<td>GB</td>
<td>Rachel Burnett</td>
</tr>
<tr>
<td>GB</td>
<td>Riad M. Fawzi</td>
</tr>
<tr>
<td>GB</td>
<td>Ken Lindup</td>
</tr>
<tr>
<td>GB</td>
<td>Charles Raab</td>
</tr>
<tr>
<td>GB</td>
<td>Peter Randle</td>
</tr>
<tr>
<td>GB</td>
<td>Anita Smith</td>
</tr>
<tr>
<td>GB</td>
<td>Frederick Wamala</td>
</tr>
<tr>
<td>GB</td>
<td>Robert Willson</td>
</tr>
<tr>
<td>HR</td>
<td>Suzana Stojakovic-Celustka</td>
</tr>
<tr>
<td>IT</td>
<td>Giovanni Iachello</td>
</tr>
<tr>
<td>NL</td>
<td>Jan Holvast</td>
</tr>
<tr>
<td>NL</td>
<td>Henrik Kaspersen</td>
</tr>
<tr>
<td>PL</td>
<td>Michal Golinski</td>
</tr>
<tr>
<td>RU</td>
<td>Victor Naumov</td>
</tr>
<tr>
<td>RU</td>
<td>Yuri Andreevich Timofeev</td>
</tr>
<tr>
<td>SE</td>
<td>Helena Andersson</td>
</tr>
<tr>
<td>SE</td>
<td>Frederik Bijork</td>
</tr>
<tr>
<td>SE</td>
<td>Simone Fischer-Hüblner</td>
</tr>
<tr>
<td>SK</td>
<td>Daniel Olejar</td>
</tr>
<tr>
<td>AT</td>
<td>René Riedl</td>
</tr>
<tr>
<td>AU</td>
<td>Chris Avram</td>
</tr>
<tr>
<td>AU</td>
<td>Maxwell Burnet</td>
</tr>
<tr>
<td>AU</td>
<td>William Caelli</td>
</tr>
<tr>
<td>AU</td>
<td>Bill Davey</td>
</tr>
<tr>
<td>AU</td>
<td>John Deane</td>
</tr>
<tr>
<td>AU</td>
<td>Graham Farr</td>
</tr>
<tr>
<td>AU</td>
<td>Peter Julliff</td>
</tr>
<tr>
<td>AU</td>
<td>Judy Sheard</td>
</tr>
<tr>
<td>AU</td>
<td>Arthur Tatnall</td>
</tr>
<tr>
<td>AU</td>
<td>Barbara Tatnall</td>
</tr>
<tr>
<td>AU</td>
<td>Marcus Wigan</td>
</tr>
<tr>
<td>BE</td>
<td>Marie d’Udekem-Gevers</td>
</tr>
<tr>
<td>BT</td>
<td>Ruud van Dael</td>
</tr>
<tr>
<td>FI</td>
<td>Reino Kurki-Suonio</td>
</tr>
<tr>
<td>FI</td>
<td>Petri Paju</td>
</tr>
<tr>
<td>FI</td>
<td>Martti Tienari</td>
</tr>
<tr>
<td>FR</td>
<td>Hans Pufal</td>
</tr>
<tr>
<td>FR</td>
<td>Gerard Verroust</td>
</tr>
<tr>
<td>GB</td>
<td>David Anderson</td>
</tr>
<tr>
<td>GB</td>
<td>Christopher Bissell</td>
</tr>
<tr>
<td>GB</td>
<td>Tilly Blyth</td>
</tr>
<tr>
<td>GB</td>
<td>Christopher P. Burton</td>
</tr>
<tr>
<td>GB</td>
<td>Martin Campbell-Kelly</td>
</tr>
<tr>
<td>GB</td>
<td>Janet Delve</td>
</tr>
<tr>
<td>GB</td>
<td>John Haynes</td>
</tr>
<tr>
<td>GB</td>
<td>Roger G. Johnson</td>
</tr>
<tr>
<td>GB</td>
<td>Frank F. Land</td>
</tr>
<tr>
<td>IT</td>
<td>Giorgio Casadei</td>
</tr>
<tr>
<td>JP</td>
<td>Mai Sugimoto</td>
</tr>
<tr>
<td>JP</td>
<td>Eiti Wada</td>
</tr>
<tr>
<td>LD</td>
<td>S. Turrance Nandasara</td>
</tr>
<tr>
<td>NL</td>
<td>Gerard Alps</td>
</tr>
<tr>
<td>NL</td>
<td>Gauthier van den Hove</td>
</tr>
<tr>
<td>NL</td>
<td>Herman Spanjersberg</td>
</tr>
<tr>
<td>NO</td>
<td>Drude Berntsen</td>
</tr>
<tr>
<td>NO</td>
<td>Norman Sanders</td>
</tr>
<tr>
<td>PT</td>
<td>Joao Miguel</td>
</tr>
<tr>
<td>RU</td>
<td>Vladimir Kitov</td>
</tr>
<tr>
<td>RU</td>
<td>Shilov Valery</td>
</tr>
<tr>
<td>SE</td>
<td>Janis Bubenko</td>
</tr>
<tr>
<td>SE</td>
<td>Harold Lawson</td>
</tr>
<tr>
<td>Country</td>
<td>Name</td>
</tr>
<tr>
<td>---------</td>
<td>--------------------------</td>
</tr>
<tr>
<td>CA</td>
<td>Keith Smillie</td>
</tr>
<tr>
<td>CA</td>
<td>M. Williams</td>
</tr>
<tr>
<td>CA</td>
<td>Allan Ollie</td>
</tr>
<tr>
<td>CU</td>
<td>Tomás López Jiménez</td>
</tr>
<tr>
<td>DE</td>
<td>Wolfgang Coy</td>
</tr>
<tr>
<td>DE</td>
<td>Frank Dittmann</td>
</tr>
<tr>
<td>DE</td>
<td>Ulf Hashagen</td>
</tr>
<tr>
<td>DE</td>
<td>Reiner W. Hartenstein</td>
</tr>
<tr>
<td>DE</td>
<td>Eva Kudrass</td>
</tr>
<tr>
<td>DE</td>
<td>Raul Rojas</td>
</tr>
<tr>
<td>DE</td>
<td>Jochen Vlieghff</td>
</tr>
<tr>
<td>DE</td>
<td>Horst Zuse</td>
</tr>
<tr>
<td>DK</td>
<td>Erik Bruhn</td>
</tr>
<tr>
<td>DK</td>
<td>Lars Heide</td>
</tr>
<tr>
<td>ES</td>
<td>Ramon Puigjaner</td>
</tr>
<tr>
<td>GB</td>
<td>Simon H. Lavington</td>
</tr>
<tr>
<td>GB</td>
<td>William Olle</td>
</tr>
<tr>
<td>GB</td>
<td>Marian Petre</td>
</tr>
<tr>
<td>GB</td>
<td>Vaughan Powell</td>
</tr>
<tr>
<td>GB</td>
<td>Brian Randell</td>
</tr>
<tr>
<td>GB</td>
<td>Charles T. Ross</td>
</tr>
<tr>
<td>GB</td>
<td>Doron Swade</td>
</tr>
<tr>
<td>HU</td>
<td>Balint Domolki</td>
</tr>
<tr>
<td>IE</td>
<td>Richard Millwood</td>
</tr>
<tr>
<td>IS</td>
<td>Oddur Benediktsson</td>
</tr>
<tr>
<td>IS</td>
<td>Magnus Magnusson</td>
</tr>
<tr>
<td>IT</td>
<td>Nadia Ambrosetti</td>
</tr>
<tr>
<td>IT</td>
<td>Corrado Bonfanti</td>
</tr>
<tr>
<td>IT</td>
<td>Fabio Gadducci</td>
</tr>
<tr>
<td>JP</td>
<td>Masami Hagiya</td>
</tr>
<tr>
<td>SE</td>
<td>Tomas Ohlin</td>
</tr>
<tr>
<td>US</td>
<td>David K. Allsford</td>
</tr>
<tr>
<td>US</td>
<td>William Aspray</td>
</tr>
<tr>
<td>US</td>
<td>Paul Ceruzzi</td>
</tr>
<tr>
<td>US</td>
<td>Martha Crosby</td>
</tr>
<tr>
<td>US</td>
<td>Michael N. Geselowitz</td>
</tr>
<tr>
<td>US</td>
<td>David Alan Grier</td>
</tr>
<tr>
<td>US</td>
<td>Mary Hopper</td>
</tr>
<tr>
<td>US</td>
<td>Bob Houghton</td>
</tr>
<tr>
<td>US</td>
<td>John Impagliazzo</td>
</tr>
<tr>
<td>US</td>
<td>Ian S. King</td>
</tr>
<tr>
<td>US</td>
<td>John A. N. Lee</td>
</tr>
<tr>
<td>US</td>
<td>Julian Reitman</td>
</tr>
<tr>
<td>US</td>
<td>Jeffrey Yost</td>
</tr>
</tbody>
</table>

**WG 9.8 – Gender Diversity and ICT**

**Chair**
Dr. Cecile K. M. CRUTZEN
Lindeweg 49
NL-6367 CH VOERENDAAL
The Netherlands
e-mail: ccr@hwh00000.de

**Secretary**
Margit Pohl
Barbara Brinkmeier
Dorothee Kluwe
Lucie Pohl

**WG 9.9 - ICT and Sustainable Development**

**Chair**
Dr. Magda DAVID HERCHEUI
UCL School of Management
University College London
Gower Street
LONDON WC1E 6BT
United Kingdom
Tel. +44 20 7679 3782
e-mail: m.hercheui@ucl.ac.uk

**Secretary**
Prof. Peter FLEISSNER
Vienna University of Technology
Institute fuer Gestaltungs- und Wirkungsforschung
Favoritenstrasse 9-11
AT-1040 WIEN
Austria
Tel. +43 1 58801 18735
Fax +43 1 58801 18793
e-mail: peter.fleissner@igw.tuwien.ac.at
TC 10 - Computer Systems Technology

est. 1976, revised 1987

Chair
Prof. Ricardo REIS, BR
Universidade Federal do Rio Grande do Sul
Instituto de Informática
Av. Bento Gonçalves, 9500
Campus do Vale, Bloco IV
C.P. 15064
BR-91501-970 PORTO ALEGRE
Brazil
Tel. +55 51 3316 9500
Fax +55 51 3316 7308
e-mail: reis@inf.ufrgs.br

Secretary
Prof. Paolo PRINETTO, IT
Politecnico di Torino
Dipart. di Automatica e Inf.
Corso Duca degli Abruzzi 24
IT-10129 TORINO
Italy
Tel. +39 011 5647007
Fax +39 011 5647099
e-mail: paolo.prinetto@polito.it

AR Patricia Borensztein
AT Alois Ferscha
BG Plamenka Borovska
CN Guojie Li
CZ Milan Češka
DE Franz J. Rammig
DK Jan Madsen

ex-officio members: WG Chairs

WG 10.2 Embedded Systems
est. 2006
URL: http://www.ifipwg102.org

Chair
Prof. Achim RETTBERG
Hella KGaA Hueck & Co.
and Carl von Ossietzky
University Oldenburg
Ammerländer Heerstr. 114-118
DE-26129 OLDENBURG
Germany
Tel. +49 441 9722 247
Fax +49 441 9722 282
e-mail: achim.rettberg@iess.org

Vice-Chair
TBD

Publications Chair
Ms. Ina Podolski
Carl von Ossietzky
University Oldenburg
Ammerländer Heerstr. 114-118
DE-26129 OLDENBURG
Germany
e-mail: ina.podolski@iess.org

AT Hermann Kopetz
AT Peter Puschner
AT Bernhard Rinner
BE Pierre Wolper
BR Luigi Carro
BR Marco Götz
BR Marcio Kreutz
BR Carlos E. Pereira
BR Flavio R. Wagner
BR Marco Wehrmeister
CA Uwe Glässer
CA Laurence T. Yang
CH Bernhard Eschemann
CH Lothar Thiele
DE Rolf Ernst
DE Gerhard Fohler
DE Wolfgang Halang
DE Bernd Kleijnjohann
DE Lisa Kleijnjohann
DE Roman Obermaisser

DE Franz Rammig
DE Klaus Schneider
DE Bernhard Steffen
DE Klaus Waldschmidt
DK Jan Madsen
ES Alfons Crespo Lorente
FR Jean Arlat
FR Thierry Jéron
FR Ahmed Jerraya
FR Jean-Marc Jezequel
FR Luis-Miguel Santana Ormeno
FR Francois Terrier
GB Guillaume Bernat
GB Raimund Kirner
NL Ed Brinksma
PT Luis Almeida
PT Joao M. Fernandes
PT Ricardo Machado
PT Luis Pinho

NO Olav Landsverk
PL Jerzy Brzezinski
PT Joao M. Fernandes
RS Mirjolub Dugić
RU Alexander L. Stempkovsky
SE Jan Torin
SI Dusan M. Kodek

US Henrique Santos
US Petru Eles
US Björn Lisper
US P. S. Thiragarajan
SI Matjac Dolinar
US Dimitri R. Avresky
US Christophe Bobda
US Thomas Conte
US Nikil Dutt
US Guang Gao
US Rajesh Gupta
US Graham Hellestrand
US Mary Jane Irwin
US Edward Lee
US Vincent J. Mooney III
US Frank Mueller
US Janos Sztpanovits
US Marilyn Wolf
US Ying C. Yeh
WG 10.3 Concurrent Systems
est. 1978, revised 1979, 1988
URL: http://www.ifipwg103.org

Chair
Dr. Valentina SALAPURA
IBM
Watson Research Center
Route 134
YORKTOWN HEIGHTS, N.Y. 10598, USA
Tel: + 1 914 945 3421
e-mail: salapura@us.ibm.com

Vice-Chair
Prof. Paraskevas EVRIPIDOU
University of Cyprus
Dept. of Computer Science
P.O. Box 20537
CY-1678 NICOSIA
Cyprus
Tel: +357 22 892696
e-mail: skevos@cs.ucy.ac.cy

Secretary
Prof. Sally A. McKEE
Chalmers University
Dept. of Computer Science
SE-41296 GOTHENBURG
Sweden
Tel: +46 31 772 1668
e-mail: mckee@chalmers.se

Prof. Lawrence RAUCHWERGER
Texas A&M University
Department of Computer Science and Engineering
Parasol Laboratory
Office 425E HRBB
COLLEGE STATION, TX 77843-3112, USA
Tel: +1 979 845 8872
Fax +1 979 458 0718
e-mail: rwerger@cse.tamu.edu

WG 10.4 Dependable Computing and Fault Tolerance
est. 1980, revised 1988
URL: http://www.dependability.org/wg10.4/

Chair
C:\Users\eduard.dundler\Desktop\tc10_aim.htmProf. Paulo VERISSIMO
SnT-Interdisciplinary Centre for Security, Reliability and Trust
4, rue Alphonse Weicker
LU-2721 LUXEMBOURG
Luxembourg
Tel. +351 21 750 01 87
Fax +351 21 750 00 84
e-mail: paulo.verissimo@uni.lu

Vice-Chair
Prof. Yair AMIR
Dept. of Computer Science
John Hopkins University
160 Malone Hall
3400 N. Charles Street
BALTIMORE, MD 21218
USA
mailto:whs@crhc.uiuc.edu
WG 10.5 Design and Engineering of Electronic Systems

URL: http://tima.imag.fr/ifip/wg10-5/index.html

Chair
Prof. Masahiro FUJITA
University of Tokyo
Department of Electronics
Engineering
7-3-1 Hongo
Bunkyu ku
TOKYO 113-8656
Japan
Tel. +81 03 5841 6664
Fax +81 03 5841 6724
e-mail: fujita@ee.t.u-tokyo.ac.jp

Vice-Chairs
Prof. Srinivas KATKOORI
University of South Florida
CSE Dept., College of Engineering
4202 East Fowler Ave. ENB 118
USA
Tel. +1 813 974 5737
Fax +1 813 974 5456
e-mail: katkoori@cse.usf.edu

Prof. Lionel TORRES
University of Montpellier
2/CNRS
LIRMM
161 Rue ADA
FR-34392 MONTPELLIER 2
France
Tel. +33 4 67 41 85 67
Fax +33 4 67 41 85 00
e-mail: lionel.torres@lirmm.fr

C:\Users\eduard.dandler\Desktop\tc10_aim.htm
<table>
<thead>
<tr>
<th>Country</th>
<th>Name</th>
<th>Country</th>
<th>Name</th>
<th>Country</th>
<th>Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>CH</td>
<td>David Atienza</td>
<td>FR</td>
<td>Salvador Mir</td>
<td>PT</td>
<td>Luis M. Silveira</td>
</tr>
<tr>
<td>CH</td>
<td>Giovanni De Micheli</td>
<td>FR</td>
<td>Ian O’Connor</td>
<td>RU</td>
<td>Alexander L. Stempkovsky</td>
</tr>
<tr>
<td>DE</td>
<td>Jürgen Becker</td>
<td>FR</td>
<td>Michel Robert</td>
<td>TR</td>
<td>H. Fatih Ugurdag</td>
</tr>
<tr>
<td>DE</td>
<td>Werner Damm*</td>
<td>GB</td>
<td>Luciano Ost</td>
<td>TW</td>
<td>Jing-Yang Jou</td>
</tr>
<tr>
<td>DE</td>
<td>Manfred Glesner</td>
<td>GB</td>
<td>Leandro Soares Indrusiak</td>
<td>US</td>
<td>Ayse Coskun</td>
</tr>
<tr>
<td>DE</td>
<td>Reiner W. Hartenstein</td>
<td>GR</td>
<td>Odysseas Koufopavlou</td>
<td>US</td>
<td>Joe P. Damore*</td>
</tr>
<tr>
<td>DE</td>
<td>Michael Hübner</td>
<td>GR</td>
<td>Dimitrios Soudris</td>
<td>US</td>
<td>Nikil Dutt</td>
</tr>
<tr>
<td>DE</td>
<td>Tiziana Margaria</td>
<td>HK</td>
<td>Chi Ying Tsui</td>
<td>US</td>
<td>Matthew Guthaus</td>
</tr>
<tr>
<td>DE</td>
<td>Klaus D. Müller-Glaser</td>
<td>IT</td>
<td>Enrico Macii</td>
<td>US</td>
<td>Hillel Ofek</td>
</tr>
<tr>
<td>DE</td>
<td>Wolfgang Nebel</td>
<td>IT</td>
<td>Graziano Pravadelli</td>
<td>US</td>
<td>Pasupathi A. Subrahmanyam*</td>
</tr>
<tr>
<td>DE</td>
<td>Franz J. Rammig</td>
<td>IT</td>
<td>Donatella Sciuto</td>
<td>US</td>
<td>Ronald Waxman*</td>
</tr>
<tr>
<td>DE</td>
<td>Wolfgang Rosenstiel</td>
<td>JP</td>
<td>Masaharu Imai</td>
<td>US</td>
<td>John Willis*</td>
</tr>
<tr>
<td>DE</td>
<td>Peter Schwarz*</td>
<td>JP</td>
<td>Takashi Kambe</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*) Honorary member
TC 11 - Security and Privacy Protection in Information Processing Systems
est. 1984, revised 2006, 2009
URL: www.ifiptc11.org

**Chair**
Prof. Steven FURNELL, GB
Plymouth University
School of Computing, Electronics and Mathematics
PLYMOUTH, PL4 8AA
United Kingdom
Tel. +44 1752 586234
e-mail: sfurnell@plymouth.ac.uk

**Vice-Chairs**
Prof. Dr.ir. Bart De DECKER, BE
Katholieke Universiteit Leuven
Dept. of Computer Science
iMinds-DistriNet
Celestijnenlaan 200 A
BE-3001 LEUVEN (Heverlee)
Belgium

Prof. Dr. Ingrid SCHAUMÜLLER-BICHL, AT
Information Security Compliance Center ISCC
University of Applied Sciences Upper Austria
Hafenstrasse 47–51 (Techcenter)
AT-4020 LINZ
Austria
Tel. +43 5 0804 11730
e-mail: ingrid.schaumueller-bichl@fh-ooe.at

**Secretary**
Prof. Lech J. JANCZEWSKI, NZ
The University of Auckland
Dept. of ISOM
Private Bag 92019
Owen G Glenn Building
12 Grafton Road, Room 480
NZ-1142 AUCKLAND
New Zealand
Tel. +64 9 923 7538
Fax +64 9 373 7430
e-mail: lech@aubccladn.ac.nz

AU William J. Caelli*
AU Peter Lambert
BG Valentin Kisimov
CA Stephen Marsh
CH Carlos Rieder
CN Sihan Qing
CY Philippos Peleties
CZ Dagmar Breclerova
DE Hartmut Pohl
DE Kai Rannenberg*
DK Gert Læsøe Mikkelsen
ES F. Javier López-Muñoz
FI Teemupekka Virtanen
FR Nora Cuppens-Boulahia
HU Gergely Biczók
IT Pierangela Samarati
JP Yoko Murayama
JP Eiji Okamoto*
KR Kwangjo Kim
NG Adesina Sodiya
NL Jaap-Henk Hoepman
NL Leon Strous*
NO Audun Jesang
PL Zbigniew Kotulski
PT André Zucette
SE Simone Fischer-Huebner
SI Tatjana Welzer
SK Daniel Olejar
US Ronald Dodge*
US Bhavani Thuraisingham (ACM)
ZA Roussow von Solms
ZW Mudiwa Mwere

ex-officio members: WG Chairs

WG 11.1 Information Security Management

est. 1985, revised 1992
URL: http://www.cscan.org/ifip

**Chair**
Prof. Gurpreet DHILLON
Dept.of Information Systems
VCU School of Business
1015 Floyd Avenue
RICHMOND, VA 23284
USA
Tel. +1 804 828 3183
e-mail: gdhillon@vcu.edu

**Vice-Chair**
Dr. Karin HEDSTRÖM
Örebro University
Swedish Business School
SE-70182 ÖREBRO
Sweden
Tel. +46 19 33 25 46
Fax +46 19 30 12 41
e-mail: karin.hedstrom@oru.se

**Secretary**
Dr. Paul S. DOWLAND
Plymouth University
Drake Circus
PLYMOUTH PL4 8AA
United Kingdom
Tel. +44 1752 586226
Fax +44 1752 586300
e-mail: pdowland@cscan.org
WG 11.2 Pervasive Systems Security
URL: http://www.cs.ru.nl/ifip-wg11.2/

Chair
Dr. Damien SAUVERON
Université de Limoges/CNRS
XLIM Institut de Recherche
Site Jidé, 83 rue d’Isle
FR-87000 LIMOGES
France
Tel. +33 5 55 43 69 83
Fax +33 5 55 43 69 77
e-mail: damien.sauveron@xlim.fr

Chair
Dr. Konstantinos MARKANTONAKIS
Royal Holloway ;
University of London
Information Security Group
EGHAM, Surrey TW20 0EX
United Kingdom
Tel. +44 1784 414409
e-mail: k.jarkantonakis@rhul.ac.uk

Secretary
Dr. Raja Naeem AKRAM
University of Waikato
Department of Computer Science
NZ-3240Hamilton
NEW ZEALAND
Tel. +64 7 838 4021
Fax +64 7 838 4155
e-mail: nakram@waikato.ac.nz

AT Stefan Fenz GB Nathan Clarke NZ Lech Janczewski
AT Stefan Jakoubi GB Neil Doherty NZ Dong-Seong Kim
AT Simon Tjoa GB Jean-Noel Ezingeard PL Andrzej Bialas
AU Helen Armstrong GB Steven Furnell PT Henrique Santos
AU Sharanam Lichtenstein GB Dimitrios Michalopoulos SA Diala Abi Haidar
AU Sean Maynard GB Maria Papadaki SA Abdulrahman Mirza
AU Malcolm R. Pattinson GB Muttukrishnan Rajarajan SE Albin Zuccato
AU Matthew Warren IN Mukhopadhyay Arunabha US Gregory Bell
CH Stephanie Teufel IN Roshan Narkhede US Michael Belton
CO Jeimy Cano IN Ramesh Ramamoorthy US Murray Jernex
DE Wolfgang Böhm IN Karruppu Swamy US Juan Lopez
FI Jorma Kajava MX Jorge A. Ruiz-Vanoie US Gurvinder Tejay
FI Reijo Savola MY Lam Wai Leong ZA Reinhardt Botha
FI Teemupekka Virtanen MY Omar Zakaria ZA Kerry-Lynn Thomson
FI Timo Wiander NL Clemens Willemsen ZA Rossouw von Solms
FR Brahim Hamid NO Annikken Seip

AT Manfred Aigner ES Pablo Garcia Bringas NL Jaap-Henk Hoepman
AT Kurt Dietrich ES Pedro Pens-Lopez NL Gerhard de Koning Gans
AT Michael Hutter ES Igor Ruiz-Aguduez NL Erik Poll
BE Gilda Avoine DK Mohamed A. Abdelraheem NO Vladimir A. Oleshchuk
BE Benjamin Martin FR Samia Bouzefrane SE Shohreh Sharif Mansouri
BE Tania Martin FR Serge Chaumette SG Li Tieyan
BE Frank Piessens FR Maryline Laurent-Maknavicius SI Dennis Trcek
BE Dave Singelée GB Julio Hernandez-Castro TR Ridvan Bakkal
CH Mark Langheinrich GB Flavio Garcia TR Selcuk Baktır
CH Rafael Accorsi GB Keith Mayes TR Fatih Birinci
DE Jonathan P. Chapman GB Siraj Shaikh TR Ugur Kafı Boyacı
DE Ioannis Krontiris GR Ioannis Askoyylakis TR Ali Ozhan Gurel
DE Kai Rannenberg HK Gerhard Hancke TR Orhun Kara
DE Delphine Reinhardt KR Deok Gyu Lee TR Süleyman Kardas
DE Ahmad-Reza Sadeghi LU Johann Großschälder TR Mehmet Sabir Kiraz
DE Ulrich Tamm LU Sjouke Mauw TR Serhat Sagdicoglu
DE Stefan Georg Weber NL Lejla Batina TR Umut Uludag

79
<table>
  <thead>
    <tr><th>Chair</th><th>Vice-Chair</th><th>Secretary</th></tr>
  </thead>
  <tbody>
    <tr><td>Prof. Sabrina DE CAPITANI DI VIMERCATI</td><td>Dr. Sara FORESTI</td><td>Dr. Lingyu WANG</td></tr>
    <tr><td>Università degli Studi di Milano<br>  Dipartimento di Informatica<br>  via Bramante, 65<br>  IT-26013 CREMA, Italy</td><td>Università degli Studi di Milano<br>  Dipartimento di Informatica<br>  via Bramante, 65<br>  IT-26013 CREMA, Italy</td><td>Concordia University<br>  CIISE, ENCS<br>  1455 de Maisonneuve Blvd. West<br>  S-EV 007.637</td></tr>
    <tr><td>Tel. +39 0 373 898 057<br>  Fax +39 0 373 898 010<br>  e-mail:sabrina.decapitani@unimi.it</td><td>Tel. +39 0 373 898 059<br>  Fax +39 0 373 898 010<br>  e-mail: sara.foresti@unimi.it</td><td>Tel. +1 514 848 2424 5662<br>  Fax +1 514 848 3171<br>  e-mail: wang@ciise.concordia.ca</td></tr>
  </tbody>
</table>
WG 11.4 Network & Distributed Systems Security

est. 1985, revised 1992
URL: http://www.ifip.tu-graz.ac.at/TC11/WG/index.htm

Chair
Prof. Dogan KESDOGAN
Department of Business Information Systems 4
University of Regensburg
DE-93040 REGENSBURG
Germany
Tel. +49 941 943 5901
Fax +49 941 943 5902
e-mail: kesdogan@ur.de

Chair
Dr. Jan CAMENISCH
IBM Research
Zurich Research Laboratory
Säumerstrasse 4
CH-8803 RUESCHLIKON
Switzerland
Tel. +41 44 724 8279
Fax +41 44 724 8953
e-mail: jca@zurich.ibm.com

Secretary
Dr. Vinh PHAM
Department of Business Information Systems 4
University of Regensburg
DE-93040 REGENSBURG
Germany
Tel. +49 941 943 5902
Fax +49 941 943 5902
e-mail: vinh.pham@ur.de

DE Kai Rannenberg
GB Siraj Ahmed Shakh
US Matthew Bishop

WG 11.5 IT Assurance and Audit

est. 2013

Chair
Dr. Abbas SHAHIM
VU University Amsterdam
Faculteit der Economische Wetenschappen en Bedrijfskunde, PGO IT Audit
De Boelelaan 1105
NL-1081 HV AMSTERDAM
The Netherlands
Tel. +31 20 59 86055
e-mail: abbas.shahim@yahoo.com

Vice-Chair
Prof. Wim VAN GREMBERGEN
Universiteit Antwerpen
Department Beleidsinformatica
S.B.329
Prinsstraat 13
B-2000 ANTWERPEN
Belgium
Tel. +32 3 265 4159
e-mail: wim.vangrembergen@uantwerpen.be

AT Ingrid Schaumueller-Bichl
CA Jagdish Pathak
DE Hartmut Pohl
DK Christian Probst
IN Pavan Duggal
JP Ryoichi Sasaki
LU Peter Y A Ryan
NL Ronald Paans
NL Eddy Vaassen
NL Hans Verkruissje
NZ Lech Janczewski

WG 11.6 Identity Management

est. 2006

Chair
Prof. Simone FISCHER-HUEBNER
Karlstad University
Dept. of Computer Science
Universitetsgatan 2
SE-651 88 KARLSTAD
Sweden
Tel. +46 54 700 1723
Fax +46 54 700 1828
e-mail: simone.fischer-huebner@kau.se

Vice-Chair
Dr. Lothar FRITSCH
Norsk Regnesentral
Norwegian Computing Center
P.O. Box 114 Blindern
NO-0314 OSLO
Norway
Tel. +47 22 85 26 03
Fax +47 22 69 76 60
e-mail: lothar.fritsch@kau.se

Secretary
TBD

AT Pavan Duggal
CA Jagdish Pathak
DE Hartmut Pohl
DK Christian Probst
IN Pavan Duggal
JP Ryoichi Sasaki
LU Peter Y A Ryan
NL Ronald Paans
NL Eddy Vaassen
NL Hans Verkruissje
NZ Lech Janczewski

81
WG 11.7/9.6 - Information Technology: Misuse and the Law

WG 11.8 Information Security Education
est. 1991
URL: http://www.ifip.tu-graz.ac.at/TC11/WG/index.htm

Chair
Dr. Lynn FUTCHER
Nelson Mandela Metropolitan University
School of Inf. Technology
PO Box 77000
PORT ELIZABETH 6031
South Africa
Tel. +27 41 504 9128
Fax +27 41 504 3313
e-mail: lynn.futcher@nmmu.ac.za

Vice-Chair
Prof. Natalia MILOSлавSKAYA
The National Research Nuclear University MEPhI
Cybernetics and Information Security Faculty
44 Department MEPhI
31 Kashirskoye shosse
MOSCOW, 11540, RUSSIA
e-mail: ngmiloslavskaya@mephi.ru

Secretary
Prof. Matthew BISHOP
University of California, Davis
Department of Computer Science
One Shields Ave.
DAVIS, CA 95616-8562
USA
Tel. +1 530 752 8060
Fax +1 530 752 4767
e-mail: bishop@ucdavis.edu

Chair
Dr. Gilbert PETERSON
Air Force Institute of Technology
Dept of Electrical and Computer Engineering
2950 Hobson Way
WPAFB, OH 45433-7765
USA
Tel. +1 937 255 3636 4281
e-mail: gilbert.peterson@afit.edu

Vice-Chair
Dr. Kam-Pui CHOW
University of Hong Kong
Department of Computer Science, Rm 301
Pokfulam Road
HK-HONG KONG
Tel. +852 2859 2191
Fax +852 2559 8447
e-mail: chow@cs.hku.hk

Secretary
Dr. Sujeet SHENOI
University of Tulsa
Computer Science Dept.
Keplinger Hall
600 S. College Ave.
TULSA, OK 74104-3189
USA
Tel. +1 918 631 3269
Fax +1 918 631 3077
e-mail: sujeet@utulsa.edu

WG 11.9 Digital Forensics
est. 2004
URL: www.ifip119.org

Chair
Dr. Gilbert PETERSON
Air Force Institute of Technology
Dept of Electrical and Computer Engineering
2950 Hobson Way
WPAFB, OH 45433-7765
USA
Tel. +1 937 255 3636 4281
e-mail: gilbert.peterson@afit.edu

Vice-Chair
Dr. Kam-Pui CHOW
University of Hong Kong
Department of Computer Science, Rm 301
Pokfulam Road
HK-HONG KONG
Tel. +852 2859 2191
Fax +852 2559 8447
e-mail: chow@cs.hku.hk

Secretary
Dr. Sujeet SHENOI
University of Tulsa
Computer Science Dept.
Keplinger Hall
600 S. College Ave.
TULSA, OK 74104-3189
USA
Tel. +1 918 631 3269
Fax +1 918 631 3077
e-mail: sujeet@utulsa.edu
<table>
<thead>
<tr>
<th>Chair</th>
<th>Vice-Chair</th>
<th>Secretary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dr. Jonathan BUTTS</td>
<td>Dr. Tyler MOORE</td>
<td>Dr. Sujeet SHENOI</td>
</tr>
<tr>
<td>Air Force Institute of Technology</td>
<td>Harvard University</td>
<td>University of Tulsa</td>
</tr>
<tr>
<td>Wright-Patterson AFB</td>
<td>Maxwell Dworkin #110</td>
<td>Computer Science Dept.</td>
</tr>
<tr>
<td>DAYTON, OH 45433</td>
<td>33 Oxford Street</td>
<td>Keplinger Hall</td>
</tr>
<tr>
<td>USA</td>
<td>CAMBRIDGE, MA 02138</td>
<td>600 S. College Ave.</td>
</tr>
<tr>
<td>Tel. +1 937 255 3636 ext 4332</td>
<td>USA</td>
<td>TULSA, OK 74104-3189</td>
</tr>
<tr>
<td>e-mail: <a href="mailto:jonathan.w.butts@gmail.com">jonathan.w.butts@gmail.com</a></td>
<td>Tel. +1 617 496 0945</td>
<td>USA</td>
</tr>
<tr>
<td></td>
<td>Fax +1 617 496 6404</td>
<td>Tel. +1 918 631 3269</td>
</tr>
<tr>
<td></td>
<td>e-mail: <a href="mailto:tmoore@seas.harvard.edu">tmoore@seas.harvard.edu</a></td>
<td>Fax +1 918 631 3077</td>
</tr>
<tr>
<td></td>
<td></td>
<td>e-mail: <a href="mailto:sujeet@utulsa.edu">sujeet@utulsa.edu</a></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>AU</th>
<th>Andrew Clark</th>
<th>SG</th>
<th>Chung-Pheng Tan</th>
<th>US</th>
<th>Nemo Lionikis</th>
</tr>
</thead>
<tbody>
<tr>
<td>AU</td>
<td>Jill Slay</td>
<td>SG</td>
<td>Kuan Seah Chua</td>
<td>US</td>
<td>Debin Liu</td>
</tr>
<tr>
<td>AU</td>
<td>Craig Valli</td>
<td>TW</td>
<td>Chris Kuo</td>
<td>US</td>
<td>Tyr Macaulay</td>
</tr>
<tr>
<td>CA</td>
<td>Eric Byres</td>
<td>TW</td>
<td>Shuen Chih Tsai</td>
<td>US</td>
<td>Bruce McMillin</td>
</tr>
<tr>
<td>CA</td>
<td>John Kuver</td>
<td>US</td>
<td>Zahid Anwar</td>
<td>US</td>
<td>Wayne Meitzler</td>
</tr>
<tr>
<td>CH</td>
<td>Tillman Schulze</td>
<td>US</td>
<td>Robert Bruce</td>
<td>US</td>
<td>Ann Miller</td>
</tr>
<tr>
<td>CN</td>
<td>Rocky Chang</td>
<td>US</td>
<td>Rodrigo Chandia</td>
<td>US</td>
<td>Krishna Moleyr</td>
</tr>
<tr>
<td>DE</td>
<td>Felix Flintge</td>
<td>US</td>
<td>Christine Coldwell</td>
<td>US</td>
<td>Robert Mullen</td>
</tr>
<tr>
<td>DE</td>
<td>Sebastian Hess</td>
<td>US</td>
<td>Benjamin Cook</td>
<td>US</td>
<td>Suva Myagmar</td>
</tr>
<tr>
<td>ES</td>
<td>Cristina Alcaraz Tello</td>
<td>US</td>
<td>Paul Craven</td>
<td>US</td>
<td>David Nicol</td>
</tr>
<tr>
<td>ES</td>
<td>Javier Lopez</td>
<td>US</td>
<td>Robert Cunningham</td>
<td>US</td>
<td>Hamed Okhravi</td>
</tr>
<tr>
<td>FR</td>
<td>Anas Abou El Kalam</td>
<td>US</td>
<td>Andrew Daglay</td>
<td>US</td>
<td>Paul Omar</td>
</tr>
<tr>
<td>GB</td>
<td>Maitland Hyslop</td>
<td>US</td>
<td>Matthew Devost</td>
<td>US</td>
<td>Mauricio Papa</td>
</tr>
<tr>
<td>GB</td>
<td>Neil Robinson</td>
<td>US</td>
<td>Bruno Dutertre</td>
<td>US</td>
<td>Jeffrey Picciotto</td>
</tr>
<tr>
<td>IL</td>
<td>Dan Assaf</td>
<td>US</td>
<td>Scott Dynes</td>
<td>US</td>
<td>Christine Pomerenening</td>
</tr>
<tr>
<td>IT</td>
<td>Sandro Bologna</td>
<td>US</td>
<td>Regis Friend-Cassidy</td>
<td>US</td>
<td>Rick Raines</td>
</tr>
<tr>
<td>IT</td>
<td>Ettore Bompar</td>
<td>US</td>
<td>Richard George</td>
<td>US</td>
<td>Indrajit Ray</td>
</tr>
<tr>
<td>IT</td>
<td>Emiliano Casalicchio</td>
<td>US</td>
<td>Adrian Gheorghe</td>
<td>US</td>
<td>Carlos Restrepo</td>
</tr>
<tr>
<td>IT</td>
<td>Paolo Donzelli</td>
<td>US</td>
<td>John Gledhill</td>
<td>US</td>
<td>Mason Rice</td>
</tr>
<tr>
<td>IT</td>
<td>Igor Nai Fovino</td>
<td>US</td>
<td>Rajni Goel</td>
<td>US</td>
<td>Rachel Rue</td>
</tr>
<tr>
<td>IT</td>
<td>Marcelo Masera</td>
<td>US</td>
<td>Eric Goetz</td>
<td>US</td>
<td>Marcus Sachs</td>
</tr>
<tr>
<td>IT</td>
<td>Alberto Paoluzzi</td>
<td>US</td>
<td>Seymour Goodman</td>
<td>US</td>
<td>William Sanders</td>
</tr>
<tr>
<td>IT</td>
<td>Julian Rusazi</td>
<td>US</td>
<td>James Graham</td>
<td>US</td>
<td>Joost Santos</td>
</tr>
<tr>
<td>IT</td>
<td>Roberto Setola</td>
<td>US</td>
<td>Yacov Hames</td>
<td>US</td>
<td>Rick Schlichting</td>
</tr>
<tr>
<td>IT</td>
<td>Michele Vicentino</td>
<td>US</td>
<td>Mark Hartong</td>
<td>US</td>
<td>Christine Shepherd</td>
</tr>
<tr>
<td>JP</td>
<td>Kenji Watanabe</td>
<td>US</td>
<td>Rob Hoffman</td>
<td>US</td>
<td>Michael Spanhower</td>
</tr>
<tr>
<td>KR</td>
<td>Insub Shin</td>
<td>US</td>
<td>Peter Huising</td>
<td>US</td>
<td>William Tobine</td>
</tr>
<tr>
<td>NL</td>
<td>Marieke Klaver</td>
<td>US</td>
<td>Jeffrey Hunker</td>
<td>US</td>
<td>Ron Trelue</td>
</tr>
<tr>
<td>NL</td>
<td>Eric Luijff</td>
<td>US</td>
<td>Eric Johnson</td>
<td>US</td>
<td>Zach Tudor</td>
</tr>
<tr>
<td>NO</td>
<td>Stig Johnsen</td>
<td>US</td>
<td>Himanshu Khurana</td>
<td>US</td>
<td>Sid Valentine</td>
</tr>
<tr>
<td>NO</td>
<td>Nils Svendsen</td>
<td>US</td>
<td>Michael Kolbe</td>
<td>US</td>
<td>Jim Watters</td>
</tr>
<tr>
<td>NO</td>
<td>Steven Wolthusen</td>
<td>US</td>
<td>Jason Kopytec</td>
<td>US</td>
<td>Duminda Wijesekera</td>
</tr>
<tr>
<td>NZ</td>
<td>Malcolm Shore</td>
<td>US</td>
<td>Michael Lavine</td>
<td>US</td>
<td>Dorsey Wilkin</td>
</tr>
<tr>
<td>AU</td>
<td>Yong Guan</td>
<td>US</td>
<td>Marcus Rogers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>US</td>
<td>Warren Harrison</td>
<td>US</td>
<td>Vassil Roussev</td>
<td></td>
<td></td>
</tr>
<tr>
<td>US</td>
<td>Mark Hartong</td>
<td>US</td>
<td>Kulesh Shanmugasundaram</td>
<td></td>
<td></td>
</tr>
<tr>
<td>US</td>
<td>Patrick Juola</td>
<td>US</td>
<td>Peter Stephenson</td>
<td></td>
<td></td>
</tr>
<tr>
<td>US</td>
<td>Michael Losavio</td>
<td>US</td>
<td>Christopher Swenson</td>
<td></td>
<td></td>
</tr>
<tr>
<td>US</td>
<td>Gavin Manes</td>
<td>US</td>
<td>Anthony Whitledge</td>
<td></td>
<td></td>
</tr>
<tr>
<td>US</td>
<td>Daniel Massey</td>
<td>US</td>
<td>Duminda Wijesekera</td>
<td></td>
<td></td>
</tr>
<tr>
<td>US</td>
<td>Nasir Memon</td>
<td>ZA</td>
<td>Bennie Fei</td>
<td></td>
<td></td>
</tr>
<tr>
<td>US</td>
<td>James Okolica</td>
<td>ZA</td>
<td>Anna Granova</td>
<td></td>
<td></td>
</tr>
<tr>
<td>US</td>
<td>Kevin O’Shea</td>
<td>ZA</td>
<td>Cornelia Grobler</td>
<td></td>
<td></td>
</tr>
<tr>
<td>US</td>
<td>Mauricio Papa</td>
<td>ZA</td>
<td>Barry Irwin</td>
<td></td>
<td></td>
</tr>
<tr>
<td>US</td>
<td>Anthony Persaud</td>
<td>ZA</td>
<td>Rut Laubscher</td>
<td></td>
<td></td>
</tr>
<tr>
<td>US</td>
<td>Mark Pollitt</td>
<td>ZA</td>
<td>Martin Olivier</td>
<td></td>
<td></td>
</tr>
<tr>
<td>US</td>
<td>Scott Redding</td>
<td>ZA</td>
<td>Colette Trompeter</td>
<td></td>
<td></td>
</tr>
<tr>
<td>US</td>
<td>H. Richard Reeve</td>
<td>ZA</td>
<td>Hein Venter</td>
<td></td>
<td></td>
</tr>
<tr>
<td>US</td>
<td>Golden Richard III</td>
<td>ZA</td>
<td>Cobus Venter</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**WG 11.10 Critical Infrastructure Protection**
est. 2006
URL: www.ifip1110.org
WG 11.11 Trust Management
est. 2006

Chair
Dr. Stephen MARSH
University of Ontario Institute of Technology
Faculty of Business and Information Technology
2000 Simcoe Street North
OSHAWA, ON L1H 7K4 Canada
Tel. +1 905 721 8668 3591
Fax +1 905 721 3178
e-mail: stephen.marsh@uoit.ca

Vice-Chairs
Prof. Christian D. JENSEN
Technical University of Denmark
Informatics & Math. Modelling
Richard Petersens Plads
DK-2800 LYNGBY Denmark
Tel. +45 4525 3724
Fax +45 4593 0074
e-mail: christian.jensen@imm.dtu.dk

Secretary
Dr. Anirban BASU
KDDI R&D Laboratories, Inc.
2-1-15 Ohara Fujimino-shi
SAITAMA 356-8502 Japan
e-mail: anirban.basu@ifiptm.org

ES Javier Lopez
FR Valerie Issarny
GB Theo Dimitrakos
GB Stefan Poslad
GR Christos Nikolaou
IE Paddy Nixon

IT Fabio Martinelli
IT Fabio Massacci
JP Yuko Murayama
NL Sandro Etalle
NO Peter Herrmann
NO Audun Josang

NO Ketil Stolen
US Ninghui Li
US John Mitchell
US Simon Shiu
US William Winsborough
US Marianne Winslett

WG 11.12 Human Aspects of Information Security and Assurance
est. 2010

Chair
Dr. Nathan CLARKE
University of Plymouth
Network Research Group
Room A304, Portland Square
PLYMOUTH PL4 8AA
United Kingdom
Tel. +44 1752 586218
Fax +44 1752 586229
e-mail: n.clarke@plymouth.ac.uk

Vice-Chair
Mr. Malcolm PATTINSON
The University of Adelaide
Business School
10 Pulteney Street
ADELAIDE SA 5005 Australia
Tel. +61 8 83134649
e-mail: malcolm.pattinson@adelaide.edu.au

Secretary
Dr. Kerry-Lynn THOMSON
Nelson Mandela Metropolitan University
School of ICT
PO Box 77000
PORT ELIZABETH 6031
South Africa
Tel. +27 41 504 3408
Fax +27 41 504 3602
e-mail: kerry-lynn.thomson@nmmu.ac.za
WG 11.13 / 8.11 Information Systems Security Research

WG 11.14 Secure Engineering
est. 2013

Chair
Dr. Fabio MARTINELLI
National Research Area C.N.R.
Istituto di Informatica e
Telematica – IIT
Information Security Group
Pisa Research Area
Via. G. Moruzzi 1
IT-56124 PISA
Italy
Tel. +39 050 315 3425
Fax +39 050 315 2593
e-mail: fabio.martinelli@iit.cnr.it

Vice-Chairs
Prof. Wouter JOOSEN
KU Leuven
Dept. Computer Science
Celestijnenlaan 200A
BE-3001 HEVERLEE
Belgium
Tel. +32 16 327640
Fax +32 16 327996
e-mail: wouter.joosen@cs.kuleuven.be

Secretary
Prof. Javier LOPEZ
University of Malaga
Computer Science Department
Campus de Teatinos s/n
ES-29071 MALAGA
Spain
Tel. +34 952 131327
Fax +34 952 131397
e-mail: jm@icc.uma.es

Prof. Fabio MASSACCI
University of Trento
Dipartimento di Scienze ed
Ingegneria dell’Informazione
Telecomunicazioni
Via Sommarive 14
IT-38123 TRENTO
Italy
Tel. +39 46 188 2086
Fax +39 46 188 2093
e-mail: fabio.massacci@unitn.it

AE
Zakaria Maamar
FR
Mohammed Achemlal
LU
Yves Le Traon

AU
Ron van der Meyden
FR
Benoit Baudry
LU
Peter Ryan

BE
Lieven Desmet
FR
Valerie Issarny
NL
Sandro Etalle

BE
Riccardo Scandariato
FR
Michael Rusinowitch
NO
Colin Boyd

CA
Mohammad Zulkernine
GB
George Spanoudakis
NO
Bjarne Solhaug

CH
David Basin
GR
Sokratis Katsikas
NO
Ketil Stoelen

CH
Christoph Sprenger
IE
Bashar Nuseibeh
QA
Khaled Khan

DE
Jorge Cuellar
IT
Alessandro Aldini
US
Martin Abadi

DE
Maritta Heisel
IT
Antonia Bertolino
US
Lujo Bauer

DE
Jan Jürgens
IT
Roberto Giacobazzi
US
Mike Burmester

DE
Nora Koch
IT
Paolo Giorgini
US
Eduardo Fernandez

DE
Heiko Mantel
IT
Paolo Inverardi
US
Adrian Gheorghe

85
TC 12 - Artificial Intelligence
est. 1989, revised 1991
URL: http://www.ifiptc12.org/

Chair
Prof. Dr. Ulrich FURBACH, DE
Universität Koblenz-Landau
Universitätsstraße 1
DE-56070 KOBLENZ
Germany
Tel. +49 261 287 2728
e-mail: uli@uni-koblenz.de

Vice-Chairs
Prof. Max A. BRAMER, GB
University of Portsmouth
School of Computing
Buckingham Building
Lion Terrace
PORTSMOUTH PO1 3HE
Hants, United Kingdom
Tel. +44 2392 846380
Fax +44 2392 846364
e-mail: max.bramer@port.ac.uk

Dr. Nenad STEFANOVIC, RS
University of Kragujevac
Faculty of Science
Department of Mathematics and Informatics
Radoja Domanovica 12
RS-34000 KRAJUJAVEC
Serbia
Tel. +381 64 2727221
Fax +381 34 335040
e-mail: nenads@kg.ac.rs

Secretary
Prof. Elizabeth M. EHLERS, ZA
University of Johannesburg
Academy of Computer Science and Software Engineering
PO Box 524
Auckland Park
ZA-2006 JOHANNESBURG
South Africa
Tel. +27 11 5592841
Fax +27 11 5592138
e-mail: emehlers@uj.ac.za

ex-officio members: WG Chairs
**) corresponding member

WG 12.1 Knowledge Representation and Reasoning
est. 2004 Aims and Scopes

Chair
Dr. Matthias THIMM
Universität Koblenz
Institute for Web Science and Technologies
Universitätsstraße 1,
Room B112
DE-56070 KOBLENZ
Germany
Tel. +49 261 287 2715
e-mail: thimm@uni-koblenz.de

FI Timo Honkela
WG 12.2 Machine Learning and Data Mining

est. 1993
URL: http://www.intsci.ac.cn/en/ifip/index.html

Chair
Prof. Zhongzhi SHI
Institute of Computing Technology, Chinese Academy of Sciences
Kexueyuan Nanlu #6
Haidan District
P.O. Box 2704
CN-100080 BEIJING
China
Tel. +86 10 82610254
Fax +86 10 62567724
e-mail: shizz@ics.ict.ac.cn

Vice-Chair
Prof. Agnar AAMODT
Norwegian Univ. of Science and Technology (NTNU)
Dept. of Computer and Information Science
Sem Sællands vei 9
(NT Building West)
NO-7491 TRONDHEIM
Norway
Tel. +47 7359 1838
Fax +47 7359 4466
e-mail:agnar.aamodt@idi.ntnu.no

Secretary
Prof. Sunil VADERA
University of Salford
Newton Building
School of Computer Science and Engineering
SALFORD M5 4WT
United Kingdom
Tel. +44 161 295 5262
e-mail: s.vadera@salford.ac.uk

AU H. Dai
AU M. Stumptner
CA Stan Matwin
CN Q. He
CN G. Wang
CN Z. Zhou
FI B. Back
FR E. Mercier-Laurent
FR J. Zucker
GB J. Bullinaria
GB F. Coenen
GB X. Yao
JP H. Motoda
PL A. Skowron
RU A. Galushkin
US R. Agrawal
US D. Leake

WG 12.3 Intelligent Agents
est. 2003

Chair
Prof. Paulo NOVAIS
Universidade do Minho
Escola de Engenharia
Departamento de Informatica/
Centro Algoritmi
Campus de Gualtar
PT-4710-057 BRAGA
Portugal
Tel. +351 253 604437/70
Fax +351 253 604471
e-mail: pjon@di.uminho.pt

Vice-Chair
Prof. Jaime SICHMAN
Universidade de Sáo Paulo
Escola Politécnica
Dept. Eng. Computação e Sistemas Digitais (PCS)
Av. Prof. Luciano Gualberto
158 travessa 3
BR-05508-970 SAO PAULO Brazil
Tel. +55 11 30915397
Fax +55 11 30915294
e-mail: jaime.sichman@poli.usp.br

BE Pierre Yves Schobbens
BR Rafael Bordini
CN Zhongzhi Shi
ES Pablo Noriega
ES Juan Pavon
FR Olivier Boissier
GB Wiebe van der Hoek
GB Michael Luck
IT Cristiano Castillo
IT Rosaria Conte
IT Andrea Omicini
NL Frank Dignum
PT Helder Coelho
PT Eugenio Oliveira
US Victor Lesser
US H. Van Parunak

WG 12.4 / 2.12 Web Semantics
WG 12.5 Artificial Intelligence Applications

est. 1993, rev. 2003

Chair
Prof. Ilias MAGLOGIANNIS
University of Piraeus
Department of Digital Systems
Grigoriou Lampingri 126, PC
GR-18532 PIRAEUS
Greece
Tel. +30 210 4142517
e-mail: imaglo@unipi.gr

AU John Debenham  FR Anne Dourgnon-Hanoune  NL Lora Aroyo
CN Daoliang Li  FR Eunika Mercier-Laurent  NO Agnar Aamodt
CN Eric Tsui  GB Max Bramer  NO Wei Qin Chen
CS Zeljko Obrenovic  GR Lazaros Iliadis  NZ Ray Kemp
CZ Olga Stepankova  GR Kostas Karpouzis  NZ Kinshuk
ES Ana Garcia-Serrano  GR Lazaros Polymenakos  NZ Tanja Mitrovic
FI Timo Honkela  IN Rakesh Mohan Bhatt  US Natasha Noy
FI Vagan Terziyan  IT Luigi Carucci Aiello  US Daniel O'Leary
FR Yves Demazeau  IT Nicola Guarino  ZA Olusola Abidogun

WG 12.6 Knowledge Management

URL: http://www.ifip.org/index.php?option=com_content&task=view&id=185&itemid=511

Chair
Prof. Eunika MERCIER-LAURENT
Knowledge & Innovation Management and IAE Lyon University
620 Chemin des Grives
FR-34160 SAINT DREZERY
France
Tel. +33 467 866 581
Fax +33 955 154 824
e-mail: eunika@innovation3d.fr

Vice-Chair
Prof. Mieczyslaw Lech OWOC
Wroclaw University of Economics
Department of Artificial Intelligence Systems
ul. Komandorska 118/120
PL-53-345 WROCŁAW
Poland
Tel. +48 71 3680503
Fax +48 71 3672778
e-mail: mieczyslaw.owoc@ue.wroc.pl

Secretary
Dr. Gülgün KAYAKUTLU
Istanbul Technical University Information & Knowledge Management
İşletme Fakültesi
TR-34367 MACKA, Istanbul
Turkey
Tel. +900 212 293 1300
e-mail: kayakullu@itu.edu.tr

AU Peter Dalmaris  FR Noël Conrutt  MX Celso Juan Flores
CH Knut Hinkelmann  FR Anne Dourgnon-Hanoune  PL Antoni Ligeza
CN Xiaomi An  FR Nada Matta  SE Helena Lindskog
CN Eric Tsui  FR Frederique Segond  UA Konstantin M Golubev
DE Jens Obermann  IL Ron Dvir  US Daniel O'Leary
FR Danielle Boulanger  IT Carla Simona
WG 12.7 Social Networking Semantics and Collective Intelligence
est. 2010

Chair
Dr. Pieter DE LEENHEER  
VU University Amsterdam  
Dept. of Computer Science  
de Boelelaan 1081a  
NL-1081 HV AMSTERDAM  
The Netherlands  
Tel. +31 20 59 83755  
e-mail: pieterdeleenheer@acm.org

Vice-Chair
Dr. John BRESLIN  
NUI Galway  
ENG-3047, Engineering  
GALWAY  
Ireland  
Tel. +353 91 492622  
Fax +353 91 494511  
e-mail: john.breslin@nuigalway.ie

Secretary
Dr. Christophe DEBRUYNE  
Trinity College Dublin  
Ireland  
e-mail: debruync@scss.tcd.ie

AT Anna Fensel  
AT Robert Meersman  
AU Chen Wu  
AU Davor Wu  
BE Sijn Christiaens  
CN Feng Ling

DE Denny Vrandecic  
GR George Vouros  
IE Alex Passant  
IE Axel Polleres  
IT Francesco Danza  
NL Hans Weigand

WG 12.8 - Intelligent Bioinformatics and Biomedical Systems
est. 2010

Chair
Prof. Phoebe CHEN  
La Trobe University  
Department of Computer Science and Computer Engineering  
BUNDOORA, VIC 3168  
Australia  
Tel. +61 3 9479 6768  
Fax +61 3 9479 3060  
e-mail: phoebe.chen@latrobe.edu.au

Vice-Chairs
Prof. Costas ILIOPoulos  
King's College London  
Department of Informatics  
The Strand, Room S5.42  
LONDON WC2R 2LS  
United Kingdom  
Tel. +44 20 7848 2809  
e-mail: c.ilioopoulos@kcl.ac.uk

Prof. Shuigeng ZHOU  
Fudan University  
School of Computer Science  
220 Handan Road  
SHANGHAI 200433  
China  
Tel. +86 21 65654504  
e-mail: sgzhou@fudan.edu.cn

Secretary
Ms. Meifania CHEN  
Curtin University of Technology  
Digital Ecosystems and Business Intelligence Institute  
Enterprise Unit 4, De Laeter Way Technology Park  
BENTLEY, WA 6102  
Australia  
Tel. +61 892 669270  
e-mail: m.chen@cbs.curtin.edu.au

DE Maja Hadzic  
GB Laurent Mouchard
WG 12.9 - Computational Intelligence

est. 2011

Chair
Prof. Tharam DILLON, AU
Latrobe University
Department of Computer Science and Computer Engineering
BUNDOORA, VIC 3168
Australia
Tel. +61 4 1810 3645
e-mail: tharam.dillon7@gmail.com

Vice-Chairs
Dr. Vasile PALADE
Coventry University
Faculty of Engineering and Computing
Priory Street
CV1 5FB COVENTRY
United Kingdom
Tel. +44 24 77 659190
e-mail: vasile.palade@coventry.ac.uk

Secretary
Dr. Kit Yan CHAN
Curtin University
Department of Electrical and Computer Engineering
BENTLEY, WA 6102
Australia
Tel. +61 8 9266 2948
Fax *61 8 9266 2819
e-mail: kit.chan@curtin.edu.au

Dr. Masoud NIKRAVESH
CITRIS – Center for Information Technology Research in the Interest of Society
University of California Berkeley
356D Sutardja Dai Hall
BERKELEY, CA 94720-1764
USA
Tel. +1 510 643 4522
Fax +1 510 642 1800
e-mail: nikraveshucb@gmail.com

Prof. Elizabeth CHANG
The University of New South Wales, UNSW Canberra
The Australian Defence Force Academy
P.O. Box 7916
CANTERBURY, BC 2610
Australia
Tel. +61 2 626 88414
Fax +61 2 626 88450
e-mail: e.chang@adfa.edu.au

AT Andreas Holzinger
AU Steve Ling
AU Xinghuo Yu
AU Xingquan Zhu
BE Bernard De Baets
CN Jun Sun
DE Francis Wei Fang
FI X.-Z. Gao
GB David Wolfe Corne
GB Artur d’Avila Garcez
GB Hak-Keung Lam
GB Rajkumar Roy
GR Yannis Hatzilygeroudis
HK C. K. Kwong
HK Sam Kwong
HK Frank H. Leung
IN Soumya Banerjee
IN Kalyanmoy Deb
IN Nikhil R. Pal
NZ Nikola Kasabov
RO Radu Emil Precup
TR Oktay Kaynak
US Mo Yuen Chow
US David Davis
US Taghi Khoshgoftaar
US Andrew Kusiak
US Lawrence J. Mazlack
US Bogdan M. Wilamowski
TC 13 - Human-Computer Interaction

est. 1989
URL: http://www.tc13.org

Chair
Prof. Philippe PALANQUE, FR
Université Paul Sabatier
LIIS-IRIT
118, route de Narbonne
FR-31062 TOULOUSE Cedex 4
France
Tel. +33 561 55 69 65
Fax +33 561 55 62 58
e-mail: palanque@irit.fr

Vice-Chairs
Prof. Simone D. Junqueira BARBOSA, BR
Departamento de Informática Rua Marquês de São Vicente
225/410 RDC
BR-22451-900 RIO DE JANEIRO
Brazil
Tel. +55 21 3527 1500 ext. 4353
Fax +55 21 3527 1530
e-mail: simone@inf.puc-rio.br

Prof. Helen PETRIE, GB
University of York
Department of Computer Science
Deramore Lane, Heslington
YORK YO10 5GH
United Kingdom
Tel. +44 1904 325 603
e-mail: helen.petrie@york.ac.uk

Secretary
Dr. Marco WINCKLER, FR
University Paul Sabatier
Institute of Research in Informatics (IRIT)
118 route de Narbonne
FR-31062 TOULOUSE CEDEX 9
France
Tel. +33 561 55 63 59
e-mail: winckler@irit.fr

Vice-Chairs
Prof. Paula KOTZÉ*, ZA
Meraka Institute
CSIR Building 43 Room C339
P O Box 395
PRETORIA 0001
South Africa
Tel. +27 12 841 4791
Fax +27 12 841 4570
e-mail: paula.kotze@merek.org.za

Prof. Helen PETRIE, GB
University of York
Department of Computer Science
Deramore Lane, Heslington
YORK YO10 5GH
United Kingdom
Tel. +44 1904 325 603
e-mail: helen.petrie@york.ac.uk

ex-officio members: WG Chairs
*) expert member
**WG 13.1 Education in HCI and HCI Curricula**

est. 1990, revised 1991
URL: http://www.hcieducation.org

**Chair**
Prof. Konrad BAUMANN
FH Joanneum
Alte Poststrasse 149
AT-8020 GRAZ
Austria
Tel. +43 316 5453 8615
Fax +43 316 5453 8601
e-mail: konrad.baumann@fh-joanneum.at

**Vice Chairs**
Prof. Jean VANDERDONCKT
Université catholique de Louvain (UCL)
Louvain School of Management
Place des Dooyens, 1
BE-1348 LOUVAIN-LA NEUVE
Belgium
Tel. +32 10 47 85 25
Fax +32 10 47 83 24
e-mail: jean.vanderdonckt@uclovain.be

**Secretary**
Prof. Konrad BAUMANN
FH Joanneum
Alte Poststrasse 149
AT-8020 GRAZ
Austria
Tel. +43 316 5453 8615
Fax +43 316 5453 8601
e-mail: konrad.baumann@fh-joanneum.at

Dr. Carlo GIOVANNELLA
University of Rome Tor Vergata
Interfaces and Multimodal
Interactive Systems
via Saturnia 55
IT-00183 ROME
Italy
Tel. +39 06 725 94524
Fax +39 06 202 3507
e-mail: info@mifav.uniroma2.it

AT Keith Andrews*
AT Johannes Feiner*
AT Elmar Krainz*
AT Johanna Pirker*
AT Peter Purgathofer
AU Mark Toleman
BE Monique Noirhomme-Fraiture*
CH Helmut Schauer
ES Julio Abascal
GB Alison Varey
GB William Wong
IE Liam Bannon
IT Sebastiano Bagnara
NL Matthias Rauterberg
NL Gerrit van der Veer
SE Jan Gulliksen
SE Lars Oestreicher
US Jean Gasen
US Tom Hewett
US Joseph A. Konstan
US Marian G. Williams
ZA Darelle van Greunen
ZA Paula Kotzé
ZA Janet Wesson

*) Observer

**WG 13.2 Methodology for User-centered System Design**

est. 1992
URL: http://wwwswt.informatik.uni-rostock.de/IFIP_13_2/

**Chair**
Dr. Marco WINCKLER
University Paul Sabatier
(Toulouse 3)
Institute of Research in
Informatics of Toulouse (IRIT)
118 route de Narbonne
FR-31062 TOULOUSE Cedex 9
France
Tel. +33 561 55 63 59
Fax +33 561 55 62 58
e-mail: winckler@irit.fr

**Vice-Chairs**
Dr. Marta Kristin
LÁRUSDÓTTIR
Reykjavik University
School of Computer Science
Kringlan 1
IS-103 REYKJAVIK
Island
Tel. +354 599 6264
Fax +354 599 6201
e-mail: marta@ru.is

**Secretary**
Dr. Kati KUUSINEN
University of Central Lancashire
Human Computer Interaction
PRESTONG, PR12HE
United Kingdom
e-mail: kkuusinen@uclan.ac.uk
Dr. Christian BOGDAN  
KTH Royal Institute of Technology  
MID Group, SCS  
Lindstedtsvägen 3, floor 6, 1617  
SE-1044 STOCKHOLM  
Sweden  
Tel. +46 08 790 9156  
Fax +46 08 790 9099  
e-mail: cristi@csc.kth.se

Thomas Grill*  
Sebastian Osswald*  
Michael Pirker  
Nasim Mahmud*  
Daniel Sinnig  
Jan Borchers  
Birgit Bomsdorf  
Mohamed Bourimi  
Anke Dittmar  
Holger Fischer  
Peter Forbrig  
Tom Gross  
Eduard Metzker  
Regina Peldszus*  
Stefan Sauer

DE  
Esen Yigitbas*  
Anders Bruun  
Morten Borup Harning  
Annelise Mark-Pejtersen  
Francisco Montero  
Ricardo Tessoriero  
Paul Klunko*  
Dimitri Drouet*  
Daniel de Wolff*  
Célia Martinie  
Philippe Palanque  
Balbir Barn

GB  
David Benyon  
Andrew Dearden  
Jonathan Day*  
Shamal Faily*  
Alistair Sutcliffe  
Anirhuda Joshi  
Davide Spano*  
Jan Havard Skjætne  
Jan Gulliksen  
Ake Walldius  
John M. Carroll

AT  
Enes Yigitbas*  
Anders Bruun  
Morten Borup Harning  
Annelise Mark-Pejtersen  
Francisco Montero  
Ricardo Tessoriero  
Paul Klunko*  
Dimitri Drouet*  
Daniel de Wolff*  
Célia Martinie  
Philippe Palanque  
Balbir Barn

LT  
Enes Yigitbas*  
Anders Bruun  
Morten Borup Harning  
Annelise Mark-Pejtersen  
Francisco Montero  
Ricardo Tessoriero  
Paul Klunko*  
Dimitri Drouet*  
Daniel de Wolff*  
Célia Martinie  
Philippe Palanque  
Balbir Barn

DK  
Debora Nascimento  
Morten Bjørkman  
Mihai Preda  
Christian Due Rossmaa  
Jörgen Vrang  
Michael Schewe  
Hans Christian Sjöholm

GR  
George Alexiou  
Nikos Katikis  
Stefanos Vlahos  
Konstantinos Karamis  
Stathis Sotiriou  
Panagiotis Iliadis  
Eleni Stamatopoulou

NL  
Jeroen Oomen  
Hans van den Broek  
Frans van Griethuysen  
Michiel van der Horst  
Friso Aarts  
Paul de Kort  
Lies Verheijen

IT  
Maria Chiara Ceriani  
Davi De Poli  
Riccardo Denti  
Michele Giorgini  
Annamaria Iacchetti  
Andrea Scaglione  
Daniele Zecchin

US  
Charles Plaxton  
Michael Bland  
Nancy Jones  
Laura Maloney  
Sarah Davis  
Christopher Stoffel  
Heidi Luebke

ZA  
Jan Borchers  
Birgit Bomsdorf  
DE  
Dimitri Drouet*  
Daniel de Wolff*  
Célia Martinie  
Philippe Palanque  
Balbir Barn

AT  
Marta Milewska  
Christian Sydow  
Debora Nascimento  
Morten Bjørkman  
Mihai Preda  
Christian Due Rossmaa  
Jörgen Vrang  
Michael Schewe  
Hans Christian Sjöholm

DK  
Debora Nascimento  
Morten Bjørkman  
Mihai Preda  
Christian Due Rossmaa  
Jörgen Vrang  
Michael Schewe  
Hans Christian Sjöholm

GR  
George Alexiou  
Nikos Katikis  
Stefanos Vlahos  
Konstantinos Karamis  
Stathis Sotiriou  
Panagiotis Iliadis  
Eleni Stamatopoulou

NL  
Jeroen Oomen  
Hans van den Broek  
Frans van Griethuysen  
Michiel van der Horst  
Friso Aarts  
Paul de Kort  
Lies Verheijen

IT  
Maria Chiara Ceriani  
Davi De Poli  
Riccardo Denti  
Michele Giorgini  
Annamaria Iacchetti  
Andrea Scaglione  
Daniele Zecchin

US  
Charles Plaxton  
Michael Bland  
Nancy Jones  
Laura Maloney  
Sarah Davis  
Christopher Stoffel  
Heidi Luebke

ZA  
Jan Borchers  
Birgit Bomsdorf  

WG 13.3 Human-Computer Interaction and Disability

URL: http://hciaccess.inf.tu-dresden.de

Chair  
Prof. Helen PETRIE  
University of York  
Department of Computer Science  
Deramore Lane, Heslington  
YORK YO10 5GH  
United Kingdom  
Tel. +44 1904 325 603  
e-mail: helen.petrie@york.ac.uk

Vice-Chair  
Prof. Dr. Gerhard WEBER  
Technical University Dresden  
Institute for Applied Computer Science  
Nöthnitzer Str.46  
DE-01062 DRESDEN  
Germany  
Tel. +49 351 463 38467  
Fax +49 351 463 38491  
e-mail: gerhard.weber@tu-dresden.de

Secretary  
Dr. David SLOAN  
University of Dundee  
Digital Media Access Group  
School of Computing  
DUNDEE DD1 4HN  
Scotland, United Kingdom  
Tel. +44 1382 365 598  
e-mail: dsloan@computing.dundee.ac.uk

AT  
Klaus Miesenberger  
Oliver Burmeister  
Robert Pedlow  
Jan Engelen  
Monique Noirhomme-Fraiture  
Karim Slegers  
Andre Freire  
Klaus Fellbaum  
Carlos A. Velasco  
Gerhard Weber  
Julio Abascal  
Daniel Burgos*  
Norman Aim  

GB  
Lesley Axelrod  
Geoff Busby  
Alistair Edwards*  
Caroline Jarrett  
Fatma Layas*  
Martin Maquire  
Colette Nicolle  
Chris Power  
Jim S. Sandhu  
Andreas Savva*  
David Swallow*  
Jenny Darzentas  

GR  
John Darzentas  
Constantine Stephanidis  
Blaithin Gallagher  
Fabio Paterno  
Mathijs Soede  
M.A. Neerincx  
Luis Azevedo  
Paula Alexandra Silva  
Jan Gulliksen  
Lars Oestreicher  
Clas Thoren  
Gregg C. Vanderheiden
WG 13.4 / 2.7 - User Interface Engineering

WG 13.5 Resilience, Reliability, Safety and Human Error in System Development

est. 1998, revised 2014
URL: http://www.irit.fr/recherches/ICS/events/groups/IFIP_WG13.5

Chair
Prof. Chris W. JOHNSON
University of Glasgow
Dept. of Computer Science
GLASGOW G12 8QJ
Scotland, United Kingdom
Tel. +44 141 330 6053
Fax +44 141 330 4913
e-mail: johnson@dcs.gla.ac.uk

Vice-Chairs
Dr. Michael FEARY
NASA, Ames Research Center
MOFFETT FIELD
CA 94035-1000
USA
Tel. +1 650 604 0203
e-mail: michael.s.feary@nasa.gov

Dr. Asaf DEGANI
General Motors R&D
7 HaMada St.
IE-HERZLIYA, 46733
Israel
Tel. +972 9 972 0613
e-mail: asaf.degani@gmail.com

Secretary
Prof. Philippe PALANQUE
Université Paul Sabatier
Toulouse III
ICS-IRIT
118, route de Narbonne
FR-31062 TOULOUSE
Cedex 4, France
Tel. +33 561 55 69 65
Fax +33 561 55 62 58
e-mail: palanque@irit.fr

AU Shelly Jeffcott
BE Anne-Sophie Nyssen
CA Jan Davies
CN Zhijie Liu
DE Regina Peldszus
DE Peter Ladkin
ES Eduardo Garcia

ES Amaya Atencia Yépez
FR Célia Martinie
FR Jari Nisula
IT Luca Chittaro
JP Kenji Itoh
NO Helle Oltedal
SE Pernilla Ulfvengren

UK

Secretary
Prof. Philippe PALANQUE
Université Paul Sabatier
Toulouse III
ICS-IRIT
118, route de Narbonne
FR-31062 TOULOUSE
Cedex 4, France
Tel. +33 561 55 69 65
Fax +33 561 55 62 58
e-mail: palanque@irit.fr

AU Shelly Jeffcott
BE Anne-Sophie Nyssen
CA Jan Davies
CN Zhijie Liu
DE Regina Peldszus
DE Peter Ladkin
ES Eduardo Garcia

ES Amaya Atencia Yépez
FR Célia Martinie
FR Jari Nisula
IT Luca Chittaro
JP Kenji Itoh
NO Helle Oltedal
SE Pernilla Ulfvengren

WG 13.6 Human Work Interaction Design

est. 2005
URL: http://hwid.m-iti.org

Chair
Prof. Pedro Filipe P. CAMPOS
Madeira Interactive Technologies Institute
Polo Cientifico e Tecnologico da Madeira
PT-9020-105 FUNCHAL
Portugal
Tel. +351 291 721006
e-mail: pcampos@uma.pt

Vice-Chairs
Prof. Jose ABDELNOUR-NOCERA
University of West London
School of Computing and Technology
St. Mary’s Road, Ealing
LONDON W5 5RF
United Kingdom
e-mail: jose.abdelnour-nocera@uwln.ac.uk

Prof. Torkil CLEMMENSEN
Copenhagen Business School
Department of IT Management
Solbjerg Plads 3
DK-2000 FREDERIKSBERG
Denmark
Tel. +45 381 52389
e-mail: tc.itm@cbs.dk

Secretary
Dr. Barbara R. BARRICELLI
Università degli Studi di Milano
Department of Computer Science
Via Comelico, 39/41
IT-20135 MILANO
Italy
Tel. +39 503 14002
e-mail: barricelli@di.unimi.it
Prof. Arminda LOPES  
Instituto Politecnico de Castelo  
Branco  
Avenida Pedro Alvares Cabral  
12,  
PT-6000-084 CASTELO  
BRANCO, Portugal  
Tel. +351 272339600  
e-mail: aglopes@ipcb.pt

AT Jan Bobeth  
AT Marc Busch  
AT Verena Fuchsberger  
AT Martin Murer  
AT Manfred Tscheligi  
AT Günther Schreder  
AT Karin Siebenhandl*  
CA Craig Anslow  
CA Catherine Burns  
DK Morten Hertzum  
DK Lene Nielsen  
DK Rikke Ongreen  
DK Rasmus Pedersen  
DK Anelise Mark Pejtersen  
DK Thomas Visby Snitker  
ES Sergio España*  


ES Oscar Pastor*  
ES Valeria Righi  
FI Heija Franssila  
FI Salla Huuskonen  
FI Virpi Roto*  
FI Pertti Vakkari  
FI Teppo Valtosen  
GB Paola Amaldi  
GB Eeffe Law  
GB Shailey Minocha  
GB William Wong*  
IE Liam Bannon*  
IN Ganesh D. Bhatkar  
IN Anant Bhaskar Garg  
IN Anirudha Joshi  
IN Dinesh Katre  


IN Pradeep Yammiyavar  
IS Ebba Pora Hvaninberg  
IT Stefano Valtetina  
JP Tetsuro Chino  
NL Bernt Meerbeek  
NO Frode Guribye  
PT Frederica Concalves  
PT Hildegaard Noromha  
PT Evangelos Karapanos*  
PT Nuno Nunes*  
RU Vladimir Abramov*  
SE Elina Eriksson*  
SE Anders Jansson  
SE Fraser Hamilton*  
US Pete Pavan*  
ZA Paula Kotze*  

*) Observers

WG 13.7 Human - Computer Interaction & Visualization HCIV

est. 2008
URL: http://ifip-tc13.org/working-groups/working-group-13-7/

Chair
Prof. Peter DANNENMANN  
Rhein Main University of Applied Sciences  
Am Brückweg 26  
DE-65428 RUSSELHEIM  
Germany  
Tel. +49 6142 898 4494  
Fax +49 6142 898 4421  
e-mail: peter.dannenmann@hs-rm.de

Vice-Chairs
Dr. Nahum GERSHON  
The MITRE Corporation  
7515 Colshire Drive  
MC LEAN, VA 22102-7508  
USA  
e-mail: gershon@mitre.org

Dr. Gerrit VAN DER VEER  
Vrije Universiteit Amsterdam  
Faculty of Sciences  
De Boelelaan 1081 A  
NL-1081 HV AMSTERDAM  
The Netherlands  
Tel. +31 20 444 7764  
Fax +31 20 644 1746  
e-mail: gerrit@acm.org

Secretary
Prof. Achim EBERT  
University of Kaiserslautern  
Gottlieb-Daimler-Str.  
DE-67663 KAISERLAUTERN  
Germany  
Tel. +49 631 205 3502  
Fax +49 631 205 3270  
e-mail: ebert@cs.uni-kl.de

AT Andreas Holzinger  
AT Margit Pohl  
CA Randy Goebel  
CA Azam Khan  
CA Jim Parker  
CH Horst Bunke  
CH Kaveh Bazargan  

DE Taimur Khan  
DE Peter Liggemeseyer  
DE Claudia Mueller  
DE Paul Mueller  
DE Sebastian Petsch  
DE Theo Schmitt  
DE Gerhard Steinebach  

IT Giuseppe Santucci  
IT Oliviero Stock  
NZ Mark Apperley  
SE Andreas Kerren  
US Kenneth Boff  
US Jeffrey Bradshaw  
US John Carroll
WG 13.8 Interaction Design and International Development

est. 2008, revised 2014
URL: www.HCI4d.net

Chair
Prof. Jose ABDELNOUR-NOCERA
University of West London
School of Computing and Technology
St. Mary’s Road, Ealing
LONDON W5 5RF
United Kingdom
e-mail: jose.abdelnour-nocera@uwl.ac.uk

Vice Chairs
Prof. Andy DEARDEN
Sheffield Hallam University
Communication and Computing Research Centre
Furnival Building, Room 9409
153 Arundel Street
SHEFFIELD S1 2NU
United Kingdom
Tel. +44 114 225 6878
Fax +44 114 225 3161
e-mail: a.m.dearden@shu.ac.uk

Secretary
Mr. Anirudha JOSHI
IIT Bombay
Powai, IN
Tel. +91 98203 45569
e-mail: anirudha@iitb.ac.in

Prof. Torkil CLEMMENSEN
Copenhagen Business School
Department of IT Management
Solbjerg Plads 3
DK-2000 FREDERIKSBERG
Denmark
Tel. + 45 381 52389
e-mail: tc.itm@cbs.dk

Prof. Christian STURM
Hamm-Lippstadt
University of Applied Sciences
Marker Allee 76
DE-59063 HAMM
Germany
Tel. +49 2381 87890
e-mail: c.sturm@arolis.com

CN Zhengjie Liu
DE Rüdiger Heimgärtner
DK Kasper Rodil
GB Daniel G. Cabrero
GB John Moore
IE Liam Bannon
KE Daniel Owu Ochieng
MY Alvin Yeo
MY Chui Yin Wong
NA Nic Bidwell
NA Heike Winschiers-Theophilus
NL Vanessa Evers
NO Charles Ess
PT Pedro Campos

DE Didier Stricker
DK Annelise Mark Peijtersen
ES Mireia Ribera
FR Younis Hijazi
GB Alan Bundy
GB Alan Dix
GB Donia Scott
GB Robert Spence
IN Sanjay Tripathi
IT Tiziana Catarci

US Mary Czerwinski
US Bernd Hamann
US Chuck Hansen
US Christopher Johnson
US Ken Joy
US Joerg Meyer
US Robert Moorhead
US John Stasko
US Ed Swan
US Desney Tan
WG 13.9 Interaction Design and Children

est. 2013
URL: http://www.idc-sig.org/

Chair
Prof. Janet READ
University of Central Lancashire
School of Computing, Engineering & Physical Sciences
CqiCI Group
PRESTON, PR1 2HE Lancashire
United Kingdom
Tel. +44 1772 893285
Fax +44 1772 892996
e-mail: jcread@uclan.ac.uk

Vice-Chair
Prof. Panos MARKOPOULOS
Eindhoven Univ.of Technology
Department of Industrial Design
P.O. Box 513, Den Dolech 2
NL-5600 MB EINDHOVEN
The Netherlands
Tel. +31 40 247 5247
Fax +31 40 247 5376
e-mail: p.markopoulos@tue.nl

Secretary
Mr. Matthew HORTON
University of Central Lancashire
School of Computing, Engineering & Physical Sciences
CqiCI Group
PRESTON, PR1 2HE Lancashire
United Kingdom
Tel. +44 1772 895151
Fax +44 1772 892996
e-mail: mplhorton@uclan.ac.uk

AU Vivien Chen
CA Alissa Antle
CH Monica Landoni
DE Heidi Schelcowe
ES Narcis Pares
GB Paul Marshall
IL Shuli Gilutz
IT Franca Garzotto
NL Tildde Bekker
PT Cristina Sylla
US Juan Pable Hourcade

Membership list is under construction

WG 13.10 Human-Centred Technology for Sustainability

est. 2015

Chair
Prof. Masood MASOODIAN
Aalto University
School of Arts, Design and Architecture
Department of Media
P.O. Box 16500
FI-00076 AALTO
Finland
e-mail: masood.masoodian@aalto.fi

Vice-Chairs
Prof. Elisabeth ANDRÉ
Augsburg University
Institut für Informatik
Universitätsstr. 6a
DE-86159 AUGSBURG
Germany
Tel. +49 821 598 2341
Fax +49 821 598 2349
E-mail: andre@informatik.uniaugsburg.de

Prof. Nuno J. NUNES
Universidade da Madeira
Dep.of Mathematics and Engineering
Campus da Penteada
PT-9000-390 FUNCHAL
Portugal
Tel. +351 291 705150
Fax +351 291 705199
E-mail: njn@uma.pt

Secretary
Prof. Thomas RIST
Hochschule Augsburg
Fakultät für Informatik
Postfach 11 06 05
DE-86031 AUGSBURG
Germany
Tel. +49 821 5586 3249
Fax +49 821 5586 3499
E-mail: thomas.rist@hs-augsburg.de

Membership list is under construction
TC 14 - Entertainment Computing

est. 2002 as SG16 / approved in 8/06 as TC14
URL: http://www.org.id.tue.nl/IFIP-TC14/index.html

Chair
Prof. Matthias RAUTERBERG, NL
Eindhoven University of Technology
Department Industrial Design
P.O. Box 513
NL-5600 MB EINDHOVEN
The Netherlands
Tel. +31 40 247 5215
Fax +31 40 243 3285
e-mail: ifip.tc14.chair@gmail.com

Vice-Chair
Prof. Dr. Paolo CIANCARINI
Universita di Bologna
Dipartimento di Scienze dell’Informazione
Mura Anteo Zamboni 7
IT-40127 BOLOGNA
Italy
Tel. +39051 2094506
Fax +39051 2094510
e-mail: paolo.ciancarini@unibo.it

Secretary
Dr. Erik van der SPEK, NL
Eindhoven University of Technology
Department Industrial Design
P.O. Box 513
NL-5600 MB EINDHOVEN
The Netherlands
Tel. +31 40 247 3605
e-mail: e.d.v.d.spek@tue.nl

ex-officio members: WG Chairs
*) Honorary member
**) Observing member

WG 14.1 - Digital Storytelling
est. 2004, revised 2006

Chair
Prof. Junichi HOSHINO
University of Tsukuba
Graduate School for Systems and Information Engineering
1-1-1 Tennoudai, Tsubuka
IBARAKI 305-8573
Japan
e-mail: jhosshino@esys.tsukuba.ac.jp

Vice-Chair
Prof. Junichi HOSHINO
University of Tsukuba
Graduate School for Systems and Information Engineering
1-1-1 Tennoudai, Tsubuka
IBARAKI 305-8573
Japan
e-mail: jhosshino@esys.tsukuba.ac.jp

Secretary
Dr. Erik van der SPEK, NL
Eindhoven University of Technology
Department Industrial Design
P.O. Box 513
NL-5600 MB EINDHOVEN
The Netherlands
Tel. +31 40 247 3605
e-mail: e.d.v.d.spek@tue.nl

ex-officio members: WG Chairs
*) Honorary member
**) Observing member

WG 14.1 - Digital Storytelling
est. 2004, revised 2006

Chair
Prof. Junichi HOSHINO
University of Tsukuba
Graduate School for Systems and Information Engineering
1-1-1 Tennoudai, Tsubuka
IBARAKI 305-8573
Japan
e-mail: jhosshino@esys.tsukuba.ac.jp

Vice-Chair
Prof. Junichi HOSHINO
University of Tsukuba
Graduate School for Systems and Information Engineering
1-1-1 Tennoudai, Tsubuka
IBARAKI 305-8573
Japan
e-mail: jhosshino@esys.tsukuba.ac.jp

Secretary
Dr. Erik van der SPEK, NL
Eindhoven University of Technology
Department Industrial Design
P.O. Box 513
NL-5600 MB EINDHOVEN
The Netherlands
Tel. +31 40 247 3605
e-mail: e.d.v.d.spek@tue.nl

ex-officio members: WG Chairs
*) Honorary member
**) Observing member
WG 14.2 - Entertainment Robot
est. 2004, revised 2006

Chair
Dr. David OBDRZALEK
Charles University
Faculty of Mathematics and Physics
Malostranske namesti 25
PRAHA 1
Czech Republic
Tel. +420 22191 4270
e-mail: david.obdrzalek@mff.cuni.cz

AT Richard Unger
CH Jacques Bally
CH Jean-Daniel Dessimoz
CZ Martin Locker
DE Achim Gottsheber
ES Julio Pastor
GB Michael Heeney
IT Giovanni Muscato
IT Corrado Santoro
PL Grzegorz Granosik
RS Branislav Borovac
RU Anton Yudin
SK Richard Balogh

WG 14.3 - Theoretical Basis of Entertainment
est. 2004, revised 2006
URL: http://www.org.id.tue.nl/IFIP-WG14.3/

Chair
Prof. Ryohei NAKATSU
National University of Singapore
Interactive & Digital Media
Institute
Blk E3A #02-04, 7
Engineering Drive 1
SINGAPORE 117574
Singapore
Tel. +65 6516 7616
Fax +65 6773 5018
e-mail: idmnr@nus.edu.sg

CA Jason Della Rocca*
BR Suely Fragoso
IT Matteo Bittanti
IT Paolo Giancarini
JP Haruhiko Katayose
JP Noriko Nagata
NL Jeffrey Goldstein*
NL Matthias Rautenberg
PH Fatima Lasay
US Johanna Blakley
US Brad Bushman
NL Jeanne B. Funk
US Susan Gold
US Bary W. Pollack
US Bill Swartout
US Peter Vorderer

*) Observer
WG 14.4 - Entertainment Games

URL: http://www.cs.unimaas.nl/IFIP-WG14.4

Chair
Prof. Stephane NATKIN
CNAM/CEDRIC
292 rue St Martin
FR-75141 PARIS Cedex 03
France
Tel. +33 1 40 27 20 64
Fax +33 1 40 27 22 96
e-mail: stephane.natkin@cnam.fr

Prof. Hiroyuki IIDA
Japan Advanced Institute of Science and Technology
Dept.of Information Processing
1-1, Asahidai, Nomi
ISHIKAWA, 923-1292
Japan

Dr. Jos UITERWIJK
Universiteit Maastricht
Faculty of Humanities and Sciences, Maastricht ICT
P.O. Box 616
NL-6200 MD MAASTRICHT
The Netherlands
Tel. +31 43 3883490
Fax +31 43 3252392
e-mail: uiterwijk@micc.unimaas.nl

CA Jonathan Schaeffer
DE André Melzer
ES Pedro Gonzalez-Calero
GB Graham Kendall
GB Abdennour El Rhalibi
IT Paolo Ciancarini
KR Jong Weon Lee
KR Woontack Woo
KR Hyun S. Yang
NL Wijnand Ijsselsteijn
NL Anton Nijholt
CA
DE
ES
GB
GB
IT
KR
KR
NL
NL

WG 14.5 - Social and Ethical Issues in Entertainment Computing

est. 2005, revised 2006

Chair
Prof. Lynne BAILLIE
Heriot-Watt University
Earl Mountbatten Building
Room G. 30
EDINBURGH EH14 4AS
United Kingdom
Tel. +44 131 451 4160
e-mail: l.baillie@hw.ac.uk

Dr. Roderick McCALL
Luxembourg Institute of Science and Technology
41, rue de Brill
LU-4422 BELVAUX
Luxembourg
e-mail: roderick.mccall@list.lu

AT Raimund Schatz
CA Claire Dormann
ES Porfirio Barroso Asenjo
GB David Benyon

GB Linda Little
GB Christopher Zielinski
HR Suzana Stojakovic-Celustka
SG Ryohei Nakatsu

US Fillia Makedon
US Joy Roberts
US Heather Vaughn

CA
DE
ES
GB
WG 14.6 – Interactive TeleVision (ITV)

est. 2007
URL: http://uitv.info/ifip

Chair
Dr. Lyn PEMBERTON
University of Brighton
School of Computing, Mathem.
and Information Sciences
Lewes Rd
BRIGHTON BN2 4GJ
East Sussex
United Kingdom
Tel. +44 1273 642476
e-mail: lyn.pemberton@bton.ac.uk

Vice-Chair
Dr. Konstantinos
CHORIANOPOULOS
Ionian University
Department of Informatics
7 Platia Tsrigoti
GR-49100 CORFU
Greece
Tel. +30 26 610 87701
e-mail: choko@ionio.gr

Secretary
Dr. Pablo CESAR
CWI
The National Research Institute
for Mathematics and
Computer Science; SEN 5
Kruislaan 413
NL-1090 GB AMSTERDAM
The Netherlands
Tel. +31 20 592 4332
Fax +31 20 592 4199
e-mail: p.s.cesar@cwi.nl

AT
Gerfried Stocker
JP
Gert van Tonder
US
Scott Fischer

CN
Feng Wang
JP
Adrian David Cheok
US
Jeffrey Huang

DK
Anthony L. Brooks
KR
Soh Yeong Roh
US
Erkki Hutamo

FR
Christian Warocquier
SG
Jeffrey Tzu Kwan Valino Koh
US
Newton Lee

GB
Roy Ascott
US
Hisham M. Bizi
US
Brian Loyall

JP
Michihiko Mihoh
US
Rod Brooks
US
Claudio Pinhanez

WG 14.7 – Art and Entertainment

est. 2007
URL: http://www.tosa.media.kyoto-u.ac.jp/ifip/

Chair
Prof. Naoko TOSA
Kyoto University
Academic Center for
Comp. and Media Studies
Yoshida-Nihon-Matsu
Sakyo-ku, Kamingyo-ku
KYOTO 606-8501
Japan
Tel. +81 75 753 9081
Fax +81 75 753 9081
e-mail: tosa@media.kyoto-u.ac.jp

Co-Chair
Dr. Jun HU
Technische Universiteit Eindhoven
Kyoto University
Dept. of Industrial Design
Designed Intelligence
P.O. Box 513
NL-5600 MB EINDHOVEN
The Netherlands
Tel. +31 40 247 8331
e-mail: j.hu@tue.nl

Secretary
Dr. Tomoki YOSHIHISA
Academic Center for
Comp. and Media Studies
Yoshida-Nihon-Matsu
Sakyo-ku, Kamingyo-ku
KYOTO 606-8501
Japan

AT
Gerfried Stocker
JP
Gert van Tonder
US
Scott Fischer

CN
Feng Wang
JP
Adrian David Cheok
US
Jeffrey Huang

DK
Anthony L. Brooks
KR
Soh Yeong Roh
US
Erkki Hutamo

FR
Christian Warocquier
SG
Jeffrey Tzu Kwan Valino Koh
US
Newton Lee

GB
Roy Ascott
US
Hisham M. Bizi
US
Brian Loyall

JP
Michihiko Mihoh
US
Rod Brooks
US
Claudio Pinhanez
WG 14.8 – Serious Games  
est. 2012

**Chair**  
Dr. Timothy MARSH  
Griffith University  
Queensland College of Art  
Griffith Film School  
Box 3370  
SOUTH BRISBANE  
QLD 4101  
Australia  
Tel. +61 7 373 56327  
Fax +61 7 373 50199  
e-mail: t.marsh@griffith.edu.au

**Co-Chair**  
Prof. Rainer MALAKA  
Universität Bremen  
Arbeitsgruppe Digitale Medien  
FB 03, MZH 5340  
Bibliothekstr. 1  
DE-28359 BREMEN  
Germany  
Tel. +49 421 218 6440  
Fax +49 421 218 64409  
e-mail: malaka@tzi.de

AT Helmut Hlavacs  
AU Erik Champion  
BE David Geerts  
CA Sydney Fels  
DE Jannicke Baalsrud Hauge  
NL Erik van der Spek  
DK Anthony L. Brooks  
NO Manuel Fradinho Oliveira  
GB Minhua Eunice Ma  
US Albert “Skip” Rizzo

WG 14.9 – Game - Accessibility  
est. 2015  
URL: http://cedric.cnam.fr/~dupirej/IFIP-WG14.9/index.html

**Chair**  
Dr. Jérôme DUPIRE  
CNAM/CEDRIC  
292 rue St Martin  
FR-75141 PARIS  
Cedex 03  
France  
Tel. +33 158 808 761  
Fax +33 140 272 296  
e-mail: dupire@cnam.fr

**Vice-Chairs**  
Prof. Lizbeth GOODMAN  
University College Dublin  
School of Education  
Roebuck Offices  
Belfield, DUBLIN 4  
Ireland  
Tel. +353 171 679 73  
e-mail: lizbeth.goodman@ucd.ie

Mr. Thomas WESTIN  
Stockholm University  
Department of Computer and Systems Sciences  
Nodhuset, Borgarfjordsgatan 12  
SE-164 55 KISTA  
Sweden  
Tel. +46 8 16 20 00  
e-mail: thomasw@dsv.su.se

AT Helmut Hlavacs  
AT Alexander Hofmann*  
AT Klaus Misienberger  
CA Arlene Astell  
DK Anthony L. Brooks  
FR Dominique Archambault  
FR Olivier Pons*  
FR Isabelle Barbet*  
DE Jannicke Baalsrud Hauge  
NL Erik van der Spek  
DK Anthony L. Brooks  
NO Manuel Fradinho Oliveira  
GB Minhua Eunice Ma  
US Albert “Skip” Rizzo

103
Technical Committee and Working Group - Aims and Scopes

There are Aims shared by all or most Committees which are not subject specific. They are as follows:

1. To establish and maintain liaison with national and international organisations with allied interests and to foster cooperative action, collaborative research and information exchange.
2. To identify subjects and priorities for research, to stimulate theoretical work on fundamental issues and to foster fundamental research which will underpin future development.
3. To provide a forum for professionals with a view to promoting the study, collection, exchange and dissemination of ideas, information and research findings and thereby to promote the state of the art.
4. To seek and use the most effective ways of disseminating information about our work including the organisation of conferences, workshops and symposia and the timely production of relevant publications.
5. To have special regard for the needs of developing countries and to seek practicable ways of working with them.
6. To encourage communication and to promote interaction between users, practitioners and researchers.
7. To foster interdisciplinary work and, in particular, to collaborate with other Technical Committees and Working Groups.

TC 1 - Foundations of Computer Science - Aims and Scopes

est. 1989 as SG14 / approved in 9/96 as TC 1

AIMS

- to support the development of theoretical computer science as a fundamental science that has similar scientific goals in understanding the information processing world as physics has in understanding the energy processing world and similar goals in developing methodology for science and technology as mathematics does;
- to support the development and exploration of fundamental concepts, models, theories, systems, and other basic tools and the understanding of laws, limits, and possibilities of information processing as well as to de-velop bridges with other sciences and their applications.

SCOPES

To encourage, organise, support, and unify the development of the following areas:

- frontiers, laws, and limits of information processing;
- fundamental formal systems;
- efficiency and complexity of information processing;
- formal systems to specify, design, verify, analyse, and manipulate
- complex information processing systems;
- theoretical foundations of various other parts of computer science and its main application areas;
- scientific paradigms of informatics and their relations to other disciplines;
- information processing fundamental concepts, models and theories to support the development of other sciences. With the goal to develop foundations and to make use of them.
WG1.1 - Continuous Algorithms and Complexity
est. 1992

AIMS

To provide a forum for international collaboration and for the dissemination of research and applications of continuous algorithms and complexity.

SCOPES

Many problems in natural science, engineering, social science and business have continuous models. Hence the scope of WG 1.1 is algorithms and especially computational complexity of algorithms for solving continuous models. By computational complexity is meant the intrinsic difficulty of solving such problems. Examples of the problems that are being studied include: ordinary and partial differential equations, continuous optimization, multivariate integration and approximation, matrix multiplication, and systems of polynomial equations.

Of special interest is the solution of continuous problems on parallel and distributed computer systems.

---

WG1.2 - Descriptional Complexity
est. 1992

AIMS

- to promote research in all aspects of descriptional complexity through conferences, publications, and more informal means of scientific interaction;
- to promote interaction and the exchange of information across traditional disciplinary boundaries;
- to provide a point of contact for all researchers in all disciplines interested in descriptional complexity and its applications.

SCOPES

All aspects of descriptional complexity, both theory and application. These aspects include:

- generalized descriptional complexity measures and their properties, including resource-bounded complexity, structural complexity, hierarchical complexity, trade-offs in succinctness, and the complexity of sets, languages, grammars, automata, etc.;
- algorithmic and other descriptional theories of randomness;
- the use of descriptional randomness and associated descriptional complexity measures in computational complexity, economy of description, cryptography, information theory, probability, and statistics;
- descriptional complexity measures for inductive inference and prediction, and the use of these measures in machine learning, computational learning theory, computer vision, pattern recognition, statistical inference, and neural networks.

---

WG1.3 - Foundations of Systems Specifications
est. 1992

AIMS

- To support and promote the systematic development of the mathematical theory and the foundations of systems specifications;
• To investigate the theory of formal models for systems specifications, development, transformation and verification;

**SCOPES**

The theoretical aspects of the specification and development of computing systems that are based on algebraic and logic concepts and can be studied systematically within a theory of systems specifications.

---

**WG 1.4 - Computational Learning Theory**
est. 1995

**AIMS**

To support the development of cellular automata theory and their applications (especially in parallel computing, in the study of complex systems, in physics, biology, artificial life, ...). To pursue the design and utilization of cellular automata machines.

**SCOPES**

Cellular automata as models of parallelism, complex systems, dynamic systems, interactive behavior, physical systems and models of biological systems. Cellular automata machines.

---

**WG 1.5 - Cellular Automata and Discrete Complex Systems**
est. 1994, dissolved 2004, re-established 2008

**AIMS**

To promote research efforts in rewriting and its applications.

To establish close cooperation between existing groups and to facilitate the emergence of new ones.

To increase awareness of rewriting techniques in the computer science community at large.

To foster development of applications of theoretical advances.

**SCOPES**

- Rewriting for computing and reasoning
- Theoretical studies of the rewriting relation of different orders.
- Complexity issues of rewriting.
- Compilation techniques and applications.
- Theory and applications of rewriting logic and calculus
- Application of rewriting to constraint solving, theorem proving and algebraic specifications
- The design, promotion and teaching of rewrite based techniques and applications.
WG 1.7 - Theoretical Foundations of Security Analysis and Design
est. 1999

AIMS

• To investigate the theoretical foundations of security as an independent discipline with firm grounds in logic, semantics and complexity.
• To discover and promote new areas of application of theoretical techniques in computer security.
• To provide a platform for presenting and discussing emerging ideas and trends.
• To strengthen research efforts in current and emerging applications of formal methods and related approaches to the design and analysis of secure systems and applications.
• To make formal methods amenable to the security practitioners, hence increasing awareness of formal verification techniques for security in the computer science community at large.
• To support and promote the systematic use of formal techniques in the development of security related applications.
• To encourage researchers, especially younger ones, to enter this field.
• To promote or support the organization of meetings in this and related areas.
• To provide a clearinghouse for dissemination of information and publications, also with industry.

SCOPES

The main research topics relevant for the Working Group include:

• formal definition and verification of the various aspects of security: confidentiality, integrity, authentication and availability;
• new theoretically-based techniques for the formal analysis and design of cryptographic protocols and their manifold applications (e.g., electronic commerce);
• information flow modelling and its application to the theory of confidentiality policies, composition of systems, and covert channel analysis;
• formal techniques for the analysis and verification of mobile code;
• formal analysis and design for prevention of denial of service.

WG 1.8 - Concurrency Theory
est. 2005

AIMS

• To develop theoretical foundations of concurrency, exploring frontiers of existing theoretical models like process algebra and various process calculi, so as to obtain a deeper theoretical understanding of concurrent and parallel systems.
• To promote and coordinate the exchange of information on concurrency theory, exchanging ideas, discussing open problems, and identifying future directions of research in the area.

SCOPES

The activities of this WG will encompass all aspects of concurrency theory and its applications. The themes of the WG include:

• process algebras and calculi,
• expressiveness of formalisms for concurrency,
• modal and temporal logics for concurrency and their extensions,
• resource sensitive approaches to concurrency and their developments,
• tools for verification and validation of concurrent systems,
• reactive models for real-time and hybrid systems,
• calculi and typing systems for mobile processes and global computing,
• stochastic and probabilistic models of concurrent processes,
• behavioral relations for processes,
• decidability and complexity issues in concurrency theory,
• semantic frameworks for concurrency such as structural operational semantics,
• integration of concepts from concurrency theory into specification, modeling and programming languages, and (global) concurrent systems, and
• exploration of the frontiers of concurrency theory in connections to various branches of computer science, including theories of operating systems, internet languages, Petri nets and their applications, communication protocols, security issues on the internet, global ubiquitous computing, distributed algorithms, embedded systems, software architectures and engineering, automata theory; information theory, various formal methods, control theory and robotics, bio-computing, quantum computing, and other emerging areas.

WG1.9/2.15 Verified Software
est. 2010

AIMS

• To contribute to a comprehensive theory of programming that covers the features needed to build practical and reliable programs.
• To contribute to a coherent toolset that automates the theory and scales up to the analysis of industrial-strength software.
• To collect realistic, verified programs as part of the Verified Software Initiative (VSI) Repository. It will do this using the following means:
  * By encouraging members to solve agreed theoretical problems, adapt tools to advance the state of the art, and to populate the VSI’s Repository by conducting experiments using the VSI’s open problem collection.
  * By having a sharply focused common sense of purpose.
  * By being committed to making progress on the VSI roadmap.
  * By producing deliverables determined by the membership.
  * By further developing the research agenda, collecting open problems, recording progress with appropriate milestones, etc.

SCOPES

Theories, tools and experiments for verified software.

WG 1.10 – String Algorithmics & Applications
est. 2015

AIMS and SCOPES

We will focus in String Algorithmics (combinatorics on words, string algorithms) and applications. We propose a unique forum for the best available research that will provide sustained inspiration within the stringological community for still better research. There is no other group that specializes in the area that the SA would cover.
TC 2 - SOFTWARE: Theory and Practice - Aims and Scopes

est. 1962, revised 1982, 1990

AIMS

To obtain a deeper understanding of programming concepts in order to improve the quality of software by studying all aspects of the software development process, both theoretical and practical.

SCOPES

The scope of the committee encompasses all aspects of the software development process including the specification, design, implementation and validation of software systems. Areas of present activity are:

- formal models of software concepts
- programming languages and techniques
- models for information storage and processing
- program support environments
- user interfaces to software systems
- software quality

WG2.1 - Algorithmic Languages and Calculi

est. 1962, revised 1963, 1990, 1992

AIMS

To explore and evaluate new ideas in the field of programming, possibly leading to the design of new languages.

SCOPES

- the study of calculation of programs from specifications;
- the design of notations for such calculations;
- the formulation of algorithm theories, using such notations;
- the investigation of software support for program derivation;
- continuing responsibility for ALGOL 60 and ALGOL 68.

WG2.2 - Formal Description of Programming-Concepts

est. 1965, revised 1991

AIMS

The aim of the Working Group is to explicate programming concepts through the development, examination and comparison of various formal models of these concepts.

SCOPES

The Working Group will investigate formalisms and models which represent different approaches to formal specification of programming concepts. The models of concern must, at least in part:

- apply to the actual computing milieu;
• have sufficient generality to describe total systems or useful subsystems;
• treat either:
  - problem specification or
  - solution specification;
• provide practical guides towards derivation of:
  - capabilities,
  - correctness,
  - equivalence,
  - implementability,
  - performance;
• assist in standards development and specification;
• have a pedagogical utility.

WG2.3 - Programming Methodology
est. 1969, revised 1991

AIMS

To increase programmers' ability to compose programs.

SCOPES

• identification of sources of difficulties encountered in present day programming;
• the interdependence between the formulation of problems and the formulation of programs, and the mapping of relations existing in the world of problems into relations among programs and their components;
• intellectual disciplines and problem-solving techniques which can aid programmers in the composition of programs;
• the problem of achieving program reliability;
• the consequences of requirements for program adaptability;
• the problem of probability of program correctness and its influence on the structure of programs and on the process of their composition;
• guidelines for partitioning large programming tasks and defining the interfaces between the parts;
• software for mechanized assistance to program composition.

WG2.4 - Software Implementation Languages

AIMS

To promote the exchange of information between researchers and users of languages for the description of software systems at all stages of development and support. The particular focus of the group is upon the pragmatic engineering aspects of the problem: measurements, evaluation, critical comparisons, and development of economically viable techniques.

SCOPES

• experience in the actual use of systems implementation languages;
• the relation of language design to the problems of system maintenance and enhancement;
• impacts of programming methodology on system implementation languages;
• compilation techniques for system implementation languages;
• software and hardware environments to facilitate the design, construction and maintenance of large
software systems;
• software portability and reusability, and their relationship to machine dependence.

WG2.5 - Numerical Software

AIMS

To improve the quality of scientific computation by promoting the development and availability of sound
numerical software.

SCOPES

1. Environment. The definition from a numerical standpoint of a set of hardware and software features
   for a computing system.
2. Tools. The development and improvement of programming languages and other tools for numerical
   computation.
3. Algorithms. The establishment of guidelines for the assessment of numerical algorithms and their
   implementations.
4. Software. The establishment of guidelines for the preparation, interoperability, verification,
   validation, documentation, distribution and maintenance of numerical software.
5. Data. The establishment of guidelines for the validation, documentation, preservation, and
   distribution of numerical data.
6. Communication. The exchange of information concerning numerical software and the
determination of the needs of computer users.

WG2.6 - Database

AIMS

For the benefit of society, to promote visibility and to increase the impact of research and development in the
database area, especially in the fields defined in the scope of the working group.

• To promote quality and relevance of academic and industrial research and development in the
database area.
• To promote ethical behavior and appropriate recommendations or guidelines for research related
   activities, e.g. submission and selection of publications, organization of conferences, allocation of
   grants and awards, and evaluation of professional merits and curricula.
• To promote cooperation between researchers and with other established bodies and organizations
   pursuing the above aims.
• To contribute to assessing the scientific merits and practical relevance of proposed approaches for
data and knowledge management.

SCOPES

The notion of database has evolved to include systems that accept, describe, store and enable manipulation and
presentation of data, information and knowledge in a wide spectrum of forms, ranging from tuples to rules, text,
images, sounds and others, with their corresponding operators, usage and management.

The group's interests cover formalisms, models, architectures, techniques and methodologies for the purpose of
designing and realizing such database systems.
These currently include in particular:

- new models, languages and theories for database design and representation
- new architectures and techniques, e.g. data warehouses, data mining, multimedia and spatio-temporal databases
- impact of new communication technologies, such as Internet, broadband networks or wireless communications
- understanding, reuse and interoperation of existing data stores
- visual user interfaces and information visualization
- new methodologies for building database applications

**WG2.7 - User Interface Engineering**

**AIMS**

To investigate the nature, concepts and construction of user interfaces for software systems.

**SCOPES**

- increase understanding of the development of user interfaces based on knowledge of system and user behaviour.
- provide a framework for reasoning about interactive systems;
- provide an engineering model for the development of user interfaces.

**WG2.8 - Functional Programming**
est. 1987, revised 1991

**AIMS**

To study the design, implementation, and use of functional (applicative) languages.

**SCOPES**

- semantic theories for functional languages;
- specification and correctness for functional programs;
- data and demand driven execution models;
- programming with higher-order functions;
- functional approaches to input-output and persistent memory;
- programming systems based on functional languages;
- novel architectures for functional programming systems;
- implementation based on combinator graph reduction;
- multiple processor implementations;
- programming styles and techniques appropriate for functional languages;
- applications and experience.

**WG2.9 - Software Requirements Engineering**
est. 1993
AIMS

The aim of the Working Group is to develop a better understanding of:

- the elicitation, specification, analysis and management of the requirements for large and complex software intensive systems;
- the interpretation and documentation of those requirements in such a way as to permit the developer to construct a system which will satisfy them.

SCOPES

The Scope of the WG includes all aspects of requirements engineering. Some examples of areas of special interest are:

- formal representation schemes and requirements modelling;
- descriptions of the requirements engineering process;
- tools and environments to support requirements engineering;
- requirements engineering methods;
- requirements analysis and validation;
- requirements elicitation, acquisition and formalisation;
- methods and tools for verification of implementations compliance with requirements;
- reuse and adaptation of requirements;
- domain modelling and analysis;
- requirements engineering for distributed, safety-critical, composite, real-time and embedded systems.

---

WG2.10 - Software Architecture

est. 2000

AIMS

The purpose of WG 2.10 is to further the practice of software architecture by integrating software architecture research and practice.

Software architecture is concerned with

- the structure and organization by which components and subsystems interact to form systems, and
- the properties of a system that can best be designed and analyzed at the system level, for example end-to-end performance and system-family compatibility.

Software architecture is important because

- it captures and preserves designers' intentions about system structure, thereby providing a defense against design decay as a system ages, and
- it is the key to achieving intellectual control over the enormous complexity of a sophisticated system.

Some of the concerns of a software architect are

- early analysis of critical whole-system properties and
- preservation of the integrity of design over time in the face of system modifications and the creation of families of related systems.

SCOPES
The aspects of software architecture within the working group’s scope are:

- identifying common problems encountered by practitioners,
- investigating notations, languages, techniques, tools, and methodologies for improving the practice of software architecture; current areas for improvement are describing software architectures, supporting reuse at the architectural level, interoperability and integration, evaluating and analyzing software architectures (e.g. for fulfillment of requirements or properties, comparing design alternatives, etc.), supporting the correspondence between the architecture and the implementation, reverse-engineering the architecture of an implemented system,
- training, education, and certification of software architects.

---

WG2.11 – Program Generation
est. 2003

AIMS

Generative approaches have the potential to revolutionize software development as automation and components revolutionized manufacturing.

At the same time, the abundancy of current research in this area indicates that there is a host of technical problems both at the foundational and engineering levels. As such, the aim of this Working Group of researchers and practitioners is to promote progress in this area.

SCOPES

The scope of this WG includes the design, analysis, generation, and quality control of generative programs and the programs that they generate.

Specific research themes include (but are not limited to the following areas):

- Foundations: language design, semantics, type systems, formal methods, multi-stage and multi-level languages, validation and verification.
- Design: models of generative programming, domain engineering, domain analysis and design, system family and product line engineering,
- model-driven development, separation of concerns, aspect-oriented modeling, feature-oriented modeling.
- Engineering: practices in the context of program generation, such as requirements elicitation and management, software process engineering and management, software maintenance, software estimation and measurement
- Techniques: meta-programming, staging, templates, in-lining, macro expansion, reflection, partial evaluation, intentional programming,
- staged configuration, stepwise refinement, software reuse, adaptive compilation, runtime code generation, compilation, integration of domain specific languages, testing.
- Tools: open compilers, extensible programming environments, active libraries, frame processors, program transformation systems,
- program specializers, aspect weavers, and tools for domain modeling.
• Application: IT infrastructure, finance, telecom, automotive, aerospace, space applications, scientific computing, health, life sciences, manufacturing, government, systems software and middleware, embedded and real-time systems, generation of non-code artifacts.
Studies of OSS deployment

- Case studies of OSS deployment, migration models, success and failure
- Role of OSS in the public sector (government, education, health etc) and ‘secondary’ (automotive, telco, medical devices etc) software sector
- OSS-compatible IT governance architectures
- Open sourcing – offshore sourcing of development
- OSS applications catalog (functionality, platforms, support providers, training needs)

Social science perspective

- Diversity and international participation in OSS projects
- Learning, knowledge sharing, collaboration, control or conflict in OSS projects
- Dynamics of OSS project communities – building and sustaining

External perspectives & influences

- Diffusion and adoption of OSS innovations
- Economic analysis of OSS – business and migration models
- OSS and alternative intellectual property regimes
- Stimulation of OSS development in vertical domains

WG2.14/6.12/8.10 – Service-Oriented Systems
est. 2011, revised 2012

AIMS and SCOPES

The new working group is proposed as a TC2, TC6, and TC8 initiative. Its goal is to organize and promote the exchange of information on fundamental as well as practical aspects of service-oriented systems. In doing so, the working group will consider service-oriented systems from a technological perspective, but it will also address their business aspects and economic impact. The aim also is to structure a research community that comprises both academia and industry (maybe through living labs) and become an active, permanent, and international forum on services-oriented systems. Besides the technological underpinnings, the working group will address the different facets of the discipline. It will also try to organize current initiatives and research, and propose suitable and sustainable future research directions.

WG2.15 – Verified Software
est. 2011

AIMS

To explore and evaluate new ideas in programming language design. Our stance is that programming languages are foremost a medium for expressing the structure and intention of software, and communicating these to other programmers. As such human factors must weigh heavily in language design decisions, requiring a well-judged balance between conflicting goals that are qualitative in nature.
SCOPES

- exploring programming paradigms and major language features, both established and novel;
- co-designing programming environments with such language features;
- articulating more clearly the problems of programming that language features are designed to address;
- identifying key design decisions that balance conflicting goals such as usability, expressivity, and the ability to provide tool support;
- combining experiences and perspectives from the full spectrum of language paradigms and communities;
- conversing at a conceptual level that practicing language designers find useful, not restricted to mathematical formalisms or empirical hypotheses;
- meta-discussion of techniques for evaluating language design decisions;
- promulgating the appreciation of design considerations among researchers, practitioners, students, and teachers.
TC 3 - Education - Aims and Scopes


AIMS

- To provide an international forum for educators to discuss research and practice in:
  - teaching informatics
  - educational uses of communication and information technologies (ICT)
- To establish models for informatics curricula, training programs, and teaching methodologies.
- To consider the relationship of informatics in other curriculum areas.
- To promote the ongoing education of ICT professionals and those in the workforce whose employment involves the use of information and communication technologies.
- To examine the impact of information and communication technologies on the whole educational environment:
  - teaching and learning
  - administration and management of the educational enterprise
  - local, national and regional policy-making and collaboration.

WG3.1 - Informatics and ICT in Secondary Education

est. 1966, revised 1998, 2008, merged with WG3.5 to form a new WG3.1 in 2014

AIMS

- To provide an international viewpoint to the debate of informatics education in all levels of school pedagogies including research activities and best practice experience.
- To promote the acquisition and updating of appropriate knowledge and expertise by all who's teaching environment requires contact with computer-based systems.
- To consider the nature, content and method of delivery for school education, within informatics (computer science) and digital technologies (digital humanities, media literacy), which will enable learners to become discerning digital citizens who are able to act in a complex and digitalized world.

SCOPES

- Early childhood and school education, including related informal learning contexts.
- Informatics education and digital literacy.
- The integration of digital technologies in education.
- The professional development of teachers.
- The provision of pre-service and in-service teacher education to enable educators to use and contribute to the development of digital educational resources, including professional learning networks.

WG3.3 - Research on Education Applications of Information Technologies

re-est. 1988, revised 2004
AIMS

To provide a forum to identify issues and priorities for research and to map research policies arising from the differing cultures in IFIP Member countries.

SCOPES

- Identification of research needs and topics in the field of education
- Improvement of research approaches and methods
- Production of synthesis of research on major topics in the field
- Dissemination of research, in partnership with educational research communities.

WG3.4 Professional and Vocational Education in ICT

AIMS

- WG3.4 is focused on professional and vocational education in ICT – education leading towards careers or professional development in some form of computing, rather than on specific teaching of informatics or use of computers in different subject areas in primary and junior secondary schools.
- Our goal is to promote the acquisition and updating of appropriate ICT knowledge and expertise by all whose working environment requires contact with computer-based systems.
- To consider the nature, content and method of delivery of professional and vocational education within the ICT sector, which will enable learners to achieve their employment expectations.
- To promote the effective use of ICT as a medium for the delivery of professional and vocational education.
- To foster life-long learning in ICT-related areas.
- To examine the activities of ICT professional bodies concerning the professional development and certification of their members.

SCOPES

- The integration of ICT knowledge and practice with other vocational and professional education.
- The provision of initial and on-going IT training and education for non-ICT professionals to enable them to use and contribute to the development of ICT systems.
- The use of computer–based training methods in the delivery of professional and vocational education.
- The on-going professional development and life-long learning of ICT practitioners.
- The membership of WG3.4 comprises academics (Computer Science, Information Systems, etc.) ICT Trainers and ICT Practitioners.
- Members’ interests include the use of computer-mediated education, the on-going professional education of both ICT and non-ICT professionals, the activities of national ICT professional bodies, the delivery of effective ICT vocational education to post-secondary learners and the integration of ICT into other tertiary curricula.

WG3.5 – Informatics and Digital Technologies in Elementary Education
est. 1983, revised 1999, 2008, merged with WG3.1 to form a new WG3.1 in 2014

WG3.7 - Information Technology in Educational Management
AIMS

- To promote effective and efficient use of Information and Communication Technologies (ICT) within the management and policies, development of and planning for educational institutions;
- To promote the use of ICT, including current and emerging technologies to support school and institutional improvement and accountability;
- To promote the use and advancement of decision support systems and knowledge management within educational management;
- To investigate the potentials of mobile technologies to support managerial and administrative work for educational institutions;
- To investigate human, social, and ethical, aspects of ITEM systems and to provide recommendations for their adequate integration in educational settings;
- To investigate aspects of security and privacy of ITEM systems and to provide recommendations for their adequate integration in educational settings;
- To develop and improve qualitative and quantitative empirical methods to understand the role of digital literacy and ICT in the management of teacher and tutor education in educational organizations;
- To encourage international exchanges of information and co-operation on state of the art research, development and implementation of ITEM systems;
- To propose themes for international, collaborative research and development in ITEM and to seek funding for such research and development from national and international bodies;
- To provide advice and support to countries, educational systems and institutions in the developmental stages of their ITEM systems.

SCOPES

- The whole range of educational institutions concerned with education, from kindergarten to higher education, adult education, professional development and training settings;
- The educational management of ICT used within lifelong, formal and informal settings;
- Local education authorities, school districts and those concerned with developing and integrating educational policies, including policy makers, advisers, parents, administrators, teachers other and education providers, and learners;
- Local, regional, national, international research and development institutions;
- Academic, government, non-profit and commercial organizations.
AIMS

To promote research and the development of fundamental concepts, models, and theories to support applications of Information Technology.

- **Research:** To identify and study advanced issues related to the application of techniques and information technologies that automate, integrate, and optimize the processes of innovation, design, production and management, including environmental issues.

- **Communication:** To provide an international forum for government, academia, research and industry for the dissemination, publication and peer review of information, research, education and practices.

- **Collaboration:** To foster interdisciplinary work and to collaborate with other Technical Committees, Working Groups and global professional organizations with allied interests.

SCOPES

This Technical Committee provides a focus for multi-disciplinary research into the application of information technologies and practices to facilitate information management - that is, to make it easier for people to have up-to-date knowledge, to be flexible, and to adapt. Some non-exclusive examples are:

- Product Lifecycle Management
- Digital Engineering / Digital Modeling and Simulation / Digital Manufacturing
- Computer Aided Product Realization
- Integrated Manufacturing / Production Management including Data Management for Production, Process Planning and Tools
- Virtual Product Creation, Visualization and Digital Verification of Product and Process
- Environmental Information and Decision Support Systems for Environmental Monitoring, Management, Research and Policy, including Risk and Crisis Management
- Virtual collaboration supporting the interaction between product, production, supply chain management, recycling and end of life disposal

Enterprise integration to facilitate product realization.

WG5.1 – Global Product Development for the whole life-cycle

AIMS

The aim of the WG is to understand the impact of the whole product life-cycle on product development. One of the major issues is to analyze and take into account the interaction of products with the environment which has a strategic importance for the sustainability of future economic development. The reason is that a product’s life-cycle costs (the total costs and impacts of ownership), which play a key role in the move toward product-service systems (PSS), become more and more important in the new economic environment. The objectives are to propose new approaches for product development taking account of the importance of life-cycle issues, and to develop IT systems supporting product information in a sustainable way through the product life-cycle. These approaches would include the consideration of “Green Technology,” so important for our world’s future.
The scope of the WG concerns all aspects of Product Development for the whole life-cycle, including rapid product development and concept validation, CAD tools for early design, collaborative product development, capture and reuse of design information, feedback from the supply chain, usage and product recycle management, etc. More specifically, the following topics are included in the scope of the WG:

- Global Product Development (global products, global teams, global processes).
- Product Life-cycle Management (PLM) (product life-cycle phases, PLM systems architecture, distributed PLM systems).
- Product Life-cycle Engineering concepts and methods (design for the life cycle, life-cycle analysis, through-life aspects – feedback from users and service, knowledge lifecycle management and long-term knowledge sustainment, product-service systems).
- New organizational issues within Product Life-cycle Engineering (collaboration strategies, business strategies and benefits, infrastructure and environment, support tools, collaboration environments and platforms, virtual and simulation environments, infrastructure and implementation processes, interoperability and security issues).
- Generic issues (value, risk and cost management, emerging standards and best practices, metrics and benchmarking, performance evaluation, educational and training approaches).

WG5.4 - Computer-Aided Innovation

est. 2005, revised 2008

AIMS

1. To contribute to identify the underlying scientific foundation of Computer Aided Innovation and also to evaluate their effectiveness and efficiency.
2. To identify the state of the art and trends of Computer Aided Innovation Software and its tools and methods by discussing organizational, technological and cognitive aspects of the application of CAI methods and tools.
3. To promote the development of Computer Aided Innovation Software focusing on end-to-end product creation process with methods and tools to ensure the feasibility and success of innovations.
4. To address the main motivations of the industrial sector, regarding the engineering innovation activity with computer tools and methods.
5. To address the main motivations of the academic community regarding theoretical foundations of computer aided innovation.

SCOPES

- The Working Group will promote regular working conferences, seminars and workshops on Computer Aided Innovation calling for contributions for clarifying the role of computer aided innovation tools.
- The Working Group will focus in connecting together managers, engineers, scientists and academics interested in pushing forward the development of this new kind of tools and methods.
- The Working Group will promote that the best papers presented at its conferences, seminars and workshops will be further developed and enhanced for being published in selected journals with high impact.

WG5.5 – COVE: Cooperation Infrastructure for Virtual Enterprises and electronic Business

est. 2001

123
AIMS

To promote and encourage the research and technological development on many aspects of business practices, advanced tools and mechanisms, and forthcoming standards, in the areas of virtual organizations, virtual enterprises, and advanced electronic business models.

To contribute to the harmonization and knowledge dissemination of world-wide research results on virtual organizations and collaborative networks, and to foster needed collaborative developments.

SCOPES

- Reference architectures for virtual organizations including life cycle models
- Collaboration models in networked organizations
- Interoperability infrastructures in collaborative web-based environments
- Safe communications and authentication frameworks
- Distributed/federated information and knowledge management
- Assessment of the role of ontology and standards
- Planning and supervision of distributed business processes
- New value systems and assessment methods
- Collaboration coordination and management
- Supporting functions for the full life cycle of virtual organizations
- Novel paradigms and methods to support distributed collaborative processes.

---

WG5.7 Advances in Production Management Systems


AIMS

The aim of WG 5.7 is to promote and encourage the advancement of knowledge and practice in the field of Integrated Production Management and to maximize global dissemination of this knowledge.

This broad aim is achieved by:

- Continuous development and refinement of a research agenda.
- Developing a research culture that nurtures research that addresses industrial need whilst maintaining academic excellence.
- Disseminating R&D results and best practices globally to both academics and practitioners through the groups annual conference and the activities of its special interest groups.

SCOPES

- design and implementation of new production planning and control systems taking into account new technology and management philosophy;
- CAPM in a CIM environment including interfaces to CAD and CAM;
- project management and cost engineering;
- knowledge-engineering in CAPM;
- CAPM for Flexible Manufacturing Systems (FMS) and Flexible Assembly Systems (FAS);
- methods and concepts in CAPM;
- economic and social implications of CAPM.
- Supply Chain Management
- Operations and manufacturing strategy
- Enterprise Requirements Planning
- Simulation
- Business Process Management
- Performance Measurement and Benchmarking
- Knowledge Management
WG5.8 Enterprise Interoperability
est. 2006, revised 2008

AIMS

The purpose of this Working Group is to progress and to disseminate research and development results in the area of Enterprise Interoperability.
The goal of this group is to bring together experts of multiple disciplines that contribute to this field.
The result of this research is to enable enterprises (networked enterprise, extended enterprise, administration, virtual organizations) or organizational units, applications to interoperate seamlessly with each other either inside and enterprise or among independent enterprises.

Specifically, the goals of the WG are:

G1: to identify the scientific foundation of enterprise interoperability and promote its acceptance by the scientific community and all stakeholders;
G2: to identify and to classify the key problems of interoperability to contribute to the elaboration of roadmaps through identifying new research challenges and to facilitate the creation of research projects;
G3: to identify practical tools, methods, architectures and solutions and promote their usage;
G4: to promote the activities and to disseminate the vision of the WG through organizing conferences, workshops and other related activities;
G5: to promote education and to promote the development of the discipline interoperability;
G6: to contribute to the standardization.

SCOPES

Activities

Activity 1: to define and characterize “Enterprise Interoperability”
1.1 describe/define enterprise interoperability
1.2 define glossary of terms used in enterprise interoperability
1.3 Review periodically

Activity 2: to identify and characterize key interoperability problems and research issues, deriving them from case studies and practical solution tools and architectures
2.1 to analyze existing project results to identify key interoperability problems, Kai Mertins
2.2 to collect industrial experience scenarios (use cases) using the defined template
2.3 to collect and classify practical tools, methods, architectures and solutions to be used in the framework

Activity 3: to contribute to the scientific foundation of Enterprise Interoperability
3.1 Use a defined framework for classification of the issues
3.2 to create, maintain and use a conceptual structure of enterprise interoperability issues
3.3 to classify previous research results using the framework to identify open research problems
3.4 to use the template to structure the key interoperability problems
3.5 to identify new theoretical contribution to enterprise interoperability area by other research disciplines
3.6 to develop metrics and maturity model for enterprise interoperability
Activity 4: Provide a roadmap for Enterprise Interoperability

4.1 to identify and analyze the existing roadmaps and other strategic programs on the field of enterprise interoperability
4.2 to provide recommendations on the definition of a new roadmap based on the results of the analysis and the outcome of activities related to goal 1. The roadmap should identify barriers, opportunities and challenges related to the field of enterprise interoperability and a time plan to address topics related to these challenges
4.3 to facilitate the creation of research projects

Activity 5: to identify subjects for standardization and the standardization bodies that (could) cover these subjects

5.1 to propose certain subjects for the standardization to standardization bodies and offer support

Activity 6: Education

6.1 to identify and collect existing courses at Bachelor and Master level, Academic and professional
6.2 to define reference curricula for enterprise interoperability education
6.3 organize and sponsor summer schools for master and doctoral students and for professionals

Activity 7: Dissemination of the results of the WG

7.1 to publish and disseminate all the results of our activities in order to promote the work performed,
7.2 to organize and sponsor conferences, workshops and seminars in the field of enterprise interoperability
7.3 Dissemination of definition and terms

WG5.10 - Computer Graphics and Virtual Worlds
est. 1987, revised 1994, 2012

AIMS

To promote and encourage the advancement of the field of computer graphics, visualization, and virtual reality in science and technology.
To organize and coordinate the International Conference on Cyberworlds as the workgroup's annual conference.

SCOPES

Computer graphics and web visualization; Geometric and Solid modeling; Computer Animation; Real-time rendering;
Virtual humans and avatars; Shared virtual worlds; Virtual collaborative spaces; Telepresence; Haptic rendering and haptic interaction;
Simulation and training in virtual environments; Augmented and mixed reality; Computer games; Multi-user internet games; Art and heritage in cyberspace;
Cyber-museums; Cyberworlds and their impact on the real worlds; Information visualization; Visual analytics;
Interactive techniques; Applications.

WG5.11 - Computers and Environment

AIMS

The goal of the WG is to foster the improved application of Information Technology in environmental research, monitoring, assessment, management and policy.
SCOPES

The WG tries to achieve this goal by:

- establishing a platform/forum amongst and between ICT and environmental professionals,
- performing knowledge-centric conferences worldwide to exchange information about state-of-the-art technology and prepare the ground for future,
- providing expert advice to government, multinational organisations and industry,
- providing strategy and policy makers with intuitive ICT concepts and solutions

AIMS

- To foster research into enterprise architecture, and in particular enterprise architecture frameworks, enterprise engineering methodologies, enterprise modeling and generic enterprise models / ontologies;
- To identify theoretically sound and practically viable techniques for the process of change toward the integrated enterprise.
- The multi-disciplinary perspective of this working group requires the synthesis of relevant results from other disciplines, such as Manufacturing Engineering and Management, Industrial Engineering, Management Science, Information Systems and Systems Engineering as well as can build on results from the Software Engineering discipline.
- Active involvement and liaison with relevant standardisation bodies, such as
  - ISO TC184 Industrial Automation Systems and Integration SC5 WG1 on Modeling and Architecture
  - ISO/IEC JTC1/SC7 Software and Systems Engineering WG42 on Architecture

SCOPES

The scope of this working group is intended to foster information exchange and evaluation of Enterprise Architecture Frameworks and associated

Enterprise modeling tools and languages (language specifications, ontological theories, computer-aided enterprise engineering tools);

Enterprise engineering methodologies and meta-methodologies;

Generic building blocks and reference models applicable to EA, such as intra- and inter- enterprise integration, agent-based integration, information integration infrastructure, organisational models, self-similar structures, and reusable industry-specific models.

In particular the WG is mainly involved in the following types of activities:

- Scholarly evaluation of enterprise architecture frameworks that capture the life-cycle of the enterprise and its constituent entities. This aspect of the WG activity is addressed through the active liaison and co-sponsorship activities with other relevant Working Group and Technical Committees of IFIP, and other organisations conducting research and development in this area, such as IFAC, and the continued organisation of the ICEIMT conference series.
- Evaluation of the physical and functional architectures of information systems, industrial production – or service systems, as well as EA program architectures (such as Information-, Process-, Applications- and Technical Architecture, as well as models of the Organisation) for complete enterprise live-cycle development and management. This aspect of the WG activity is mainly addressed through liaison and participation in relevant standard bodies.
WG5.13 – Bioinformatics and its Applications
est. 2010, revised 2015

AIMS

1. To understand and identify the challenges of Bioinformatics, and its Applications for development of
   skills, softwares, tools databases and solving real life problems related to health, food, energy,
   environment and agriculture etc.
2. Develop theoretical and technological foundations for meeting the challenges of bioinformatics and its
   applications
3. Global integration of biological data and knowledge resources for meeting the challenges of
   bioinformatics
4. Create & promote Inter disciplinary teams/groups for developing new educational training programs,
   technology dissemination, research and development with focus on bioinformatics

SCOPES

- WG will serve as platform to create expertise and pool of scientists in various areas of bioinformatics
  from institutions all over the world to understand the new challenges and opportunities.
- Encourage sharing of knowledge and resources like biotech infrastructure, grid computing
  infrastructure, databases, softwares and other electronic resources
- To develop and enhance excellence through new educational training programs in various areas of
  bioinformatics
- It will serve as forum with central focus to improve understanding and R & D on various aspects of
  bioinformatics
- To provide a forum for dissemination of Scientific and technological knowledge in the field of
  bioinformatics by organizing seminars, conferences, need based faculty training programs
- To provide support for research & development and establish linkages with biotech, pharmaceutical
  and IT industry
- Provide a platform for interaction among scientists from various disciplines like IT, computer science,
  mathematics, life sciences, agricultural sciences and medical sciences for research and development of
  biological databases, bioinformatics softwares, integration of resources and applications in areas of health,
  energy, food, environment and agriculture

WG5.14 - Advanced Information Processing for Agriculture

AIMS

The IFIP Work Group on Advanced Information Processing for Agriculture (AIPA) encourages the scientific and
 technological development of IT enhanced agriculture. The specific aims are:

- to promote the use of knowledge sources and methods offered by computer and computing science in
  the agriculture.
- to identify subjects and priorities, stimulating fundamental research for challenging future developments
  of the agriculture and of the related food industrial, energetic and environmental activities.
- to disseminate the experiences of farmers, managers and researchers about the profitable technologies
  and policies in agriculture.
- to provide business opportunities by communicating with stakeholders, including agriculture researchers,
  IT professionals, consultants and government officials.
- to support exchange of knowledge, strategies and experiences between stakeholders.
to promote and encourage interactions among agriculture scientists, meteorologists, biologists with IT professionals and other collaborators to develop implement methods, techniques, tools, as well as information and knowledge management systems enhancing agricultural technology.

to organize a global advisory group of R&D experts for using IT methods and tools in the agriculture.

to develop and enhance excellence through new educational training programs and technology dissemination among faculty members, professionals and students.

to establish and strengthen the link between academia, R&D companies, development agencies, governmental organizations, etc. for knowledge based resource utilization.

to support teaching and learning process and to develop a platform for the knowledge transfer in agriculture and the related fields between professionals, faculties, students and organizations.

to serve as the platform for IT based dissemination of scientific and technological knowledge in the field of agricultural advisory systems.

to organize workshops, conferences, symposia and seminars in the various areas of IT applications in agriculture.

SCOPES

The AIPA Work Group will serve as platform to organize a global advisory group of R&D experts for using IT methods and tools in the agriculture in various areas of agricultural and related sciences from institutions all over the world. This information will be provided for online use by various user communities.

bullet to develop and enhance excellence through new educational training programs in various areas of crop/soil modeling & other IT applications which can be delivered to agricultural institutions and individuals across the world through standalone and hosted programs.

bullet It will serve as a platform to provide information and other resources of professionals, faculty and students for the promotion of agriculture oriented bioinformatics activities

bullet to provide a forum for developing teaching and learning processes in different disciplines with the central focus to improve the IT understanding and R&D on various aspect of agricultural and related sciences.

bullet to provide a forum for dissemination of scientific and technological knowledge in the field of agricultural and related sciences by organizing seminars/conferences and developing databases, web sites, etc.

bullet Organize various, need based faculty training programs in various areas of agricultural and related sciences.

bullet Provide a platform for interaction among scientists from various disciplines like IT, computer science, mathematics, life sciences, agricultural sciences, and meteorological sciences for the development of agricultural solutions.

bullet Promote and encourage the collaborations among scientists to create inter disciplinary groups for research and development of agricultural databases, bioinformatics software and application in areas of weather, pest/disease and agriculture.

bullet Encourage sharing of knowledge and resources like agro-meteorological infrastructure, data communication, grid computing, open (source) software and other electronic resources.
TC 6 - Communication Systems - Aims and Scopes

est. 1971, revised 1987 and 1991

AIMS

- to promote the international exchange of information related to communication systems;
- to bridge gaps existing between users, telecommunication operators, service providers and computer and equipment manufacturers;
- to establish working contacts with international bodies concerned with data communication, such as ITU, ETSI, ISO, IEEE, IETF, ITC and ATM Forum.

SCOPES

The Scope of its work includes all aspects of communication systems, such as research on and design, manufacture and operation of products, systems, concepts and architectures related to information exchange. Some examples of areas of special interest are:

- Work fostering the development of standards;
- Formal protocol specification and verification techniques;
- National and international communication networks;
- Local and wide area communication networks;
- Integrated services digital networks;
- Network management;
- Distributed computing and information interchange between databases within a network of computers;
- Communication systems in the office and manufacturing area;
- Communications tools and communication services;
- Promotion of existing and innovative communication concepts both in developing countries and in developed countries;
- Teleservice architectures;
- Multimedia communications;
- New applications of communication systems, e.g. electronic commerce.

WG6.1 - Architecture and Protocols for Distributed Systems


AIMS

- To identify and study questions associated with the development of distributed systems and the communications and middleware protocols that support distributed applications.
- To support convergence of information processing systems, communication and networking technologies into a distributed infrastructure that is open for application to all members of the global society.
- To investigate rigorous methods applicable to the specification, verification, implementation and testing of distributed systems and applications.
- To support and promote the systematic use of these methods, and make them amenable to the practitioners, hence increasing awareness of formal methods in the distributed networking and computer networking areas at large.
- To bring together researchers, developers, and practitioners working in these areas to discuss recent innovative results and future directions by promoting and supporting the organization of meetings, workshops and conferences.
- To disseminate information and publications, foster an active participation of industry and encourage the transfer of knowledge between academia and industry.
- To encourage young researchers to enter this field.
SCOPES

This WG provides a framework for the launching and the continued organization of activities in areas that include:

- Formal Description Techniques: including rigorous models, methods and tools applicable to the design, specification, validation, verification, implementation, easy prototyping, efficiency evaluation, and testing of communicating systems and object-based distributed systems.
- Open Distributed Systems: including the design, implementation, deployment and evaluation of distributed systems platforms and architectures for networked environments and distributed applications.
- Quality of Service: including architectures, services, multimedia, operating systems and middleware in a networked or distributed environment.

WG6.2 – Network and Internetwork Architectures
est. 1994, revised 2001, 2009

AIMS

To identify and study advanced issues related to networking and internetworking design, with main emphasis on the provision of services at the network layer, on the integration of present and future technologies for physical and data link layers, and on techniques for providing network-wide internetwork services.

SCOPES

This WG provides a framework for the launching and the continued organization of activities in the area of Network and Internetwork architectures, namely:

- Network Architectures: including architectures for the Future Internet, architectures of local area networks, wide area networks, access networks, mobile IP networks, internetworking.
- Network Protocols: including transport and network layer protocols, and protocols for Internet evolution.
- Network control and Quality of Service: including traffic engineering and control, signalling, network quality of service.
- Network Components Design: including switch and router design, techniques for the transport of packetized voice and video.
- Parallel processing of network protocols: including multi-core architectures for network elements.
- Overlay Services and Systems: including Peer-to-Peer communication services and virtualisation.
- Network resilience: robust and survivable networks.
- Network measurements: traffic monitoring and analysis.
- Network Science: including models, tools and techniques to design and analyze complex networks.
- Energy-efficient network protocols and architectures: including network core nodes and cloud computing aspects.
- Network protocols and transport protocols for Delay-tolerant networks and space internetworks.

WG6.3 - Performance of Communication Systems
est. 1994, revised 2001, 2010

AIMS

WG 6.3 is aimed at promoting the use of the performance evaluation techniques for studying and optimizing existing and future communication systems
The WG organizes and promotes activities related to modeling, analysis, simulation and measurement of computer communication systems, with a special attention to studying and optimizing the performance of:

- Wired/wireless computer communication networks;
- Existing and future network technologies;
- LAN/MAN/WAN;
- Network Services and Applications;
- Internet architecture, protocols and services;
- Internet of things;
- Green networking;
- Content- and service-centric architectures;
- Peer-to-peer, overlay, and content distribution networks;
- Mobile and ubiquitous networks;
- Self-organizing networks;
- Mobile and on-line social networks.

WG6.4 – Internet Applications Engineering

WG6.6 - Management of Networks and Distributed Systems

AIMS

To facilitate cooperation between different organizations and individuals internationally in the areas of distributed operations and management, integrated network management, systems management, and service engineering. To be an effective conduit in the technology transfer between the academic and research communities, industry and the standard bodies.

SCOPES

Our planet is increasingly being networked using a variety of media, a variety of protocols and a variety of services. On the other hand, computers are becoming increasingly pervasive in a variety of forms and architectures ranging from large scale high performance systems to micro computers in any type of appliances, cars, etc. The scope of WG 6.6 is Operations and Management paradigms and technologies for these novel and complex systems and networks continuously evolving over different levels of abstraction such as element, network, service, and business level. The Operations and Management encompass different function areas such as configuration, fault, accounting, performance and security. This includes new technologies such as autonomic computing, distributed and policy based management as well as already established management protocols and information models. The scope of the working group encompass the operation and management of existing networked systems including enterprise networks and multi-provider networks as well as emerging ad-hoc and sensor networks, Grids, peer to peer networks and interplanetary networks.
WG6.7 - Smart Networks  

AIMS

To identify and study current issues related to the state-of-the-art and the development of intelligent capabilities in networks. These issues include the distribution, the management, the control of every kind of algorithms inside the network. These intelligent capabilities lead to the concept of autonomic networking. Consequently to identify future trends of the network performance from industrial as well as the academic point of view.

SCOPES

Smart Networks is concentrated on research on tools and services able to be placed on top of network algorithms in order to adapt them. The concept of smart networks was developed as a step to give the network a way to adapt itself to changes within the environment and following network conditions. New emerging research and technologies include autonomic networking, Intelligent Agents, knowledge plane, situated view, Configurable Architectures for Software and Hardware, Dependable Reconfigurable Networks, Mobility Management, QoS Management, Security Management, Flow Control, Mobility and Network Integration Issues.

WG6.8 - Mobile and Wireless Communications  

AIMS

To organise and promote the exchange of information on wireless communication systems and networks, fixed and mobile, terrestrial and space, local and global. To help in the research, development, design, standardisation and applications for mobile and wireless modules, equipment and systems. To examine technical operational capabilities of the future mobile and wireless networks for voice, data, text and image communications. The results of the work will be made available to individuals as well as organisations concerned, such as manufacturers, operators, common carriers, standardisation bodies, users.

SCOPES

The scope of the Working Group includes:

- Wireless LANs.
- Wireless Sensor Networks.
- Wireless Actor Networks.
- Mobile computing.
- Cellular networks.
- Ad-hoc networks.
- Mobile and wireless personal communications.
- Short range communications and applications.
- Digital microwave systems and networks.
- Digital radio and TV broadcasting.
- Satellite networks.

All topics should be examined from the viewpoint of architecture and protocols, modulation, coding and decoding, methods of communication functions (multiple access, error control, flow control, routing, etc.), security, implementation, user aspects, legal, economic, social and human related issues.
WG6.9 - Communication Systems for Developing Countries
est. 2002

AIMS

To identify and study technical problems related to the access to, understanding of and application of network and telecommunications technology in developing countries or regions.

To encourage cross-fertilisation of concepts and techniques among developing countries, and between developing countries and developed countries.

To promote activities oriented to the diffusion of the methods and techniques for accessing computer networks in developing countries or regions.

SCOPES

The areas of study include models and methods for transfer of concepts and methods in communication systems and establishment of new applications in developing regions for existing technologies.

The requirements of the users of those regions include cost-effective technologies for global access, rural access to services and social development in those regions through appropriate applications of communication systems.

The problems of human resources, sharing of experience and cost of technology are particularly acute, and are to be examined in detail.

Although not limited to, the following items are of particular significance in the scope of the Working Group:

- Satellite systems
- Applications for cellular technology
- Alternative network technologies
- Technologies for distance learning, e-business, tele-meeting and any other reducing the distance effect between partners
- Global access and interconnectivity technologies
- Internet services.

WG6.10 - Photonic Networking

MOTIVATION

Photonic Communication networks hold the promise of solving several problems in the current generation of networks, among them restricted transmission capacity and limited performance capability.

AIMS

To strengthen research on photonic networks, to explore the potentials of photonic networks and to accelerate their early development. Additionally, the Working Group provides a platform for presenting and discussing research activities, major achievements and trends involving the all-optical communication networks.

SCOPES

The Working Group scope includes:

- Architectures, system design, control mechanisms and applications that exploit the abundant transmission capacity and flexibility of photonics.
- Development of analytical and simulation tools as well as methods for analysing, operating, dimensioning, and planning photonic networks.
WG6.11 – Communication aspects of the e-World
est. 2000, revised 2001, 2010

AIMS

To organise and promote the exchange of information on communication protocols and information exchange mechanisms for Electronic Commerce. To foster research, development, standardisation, and applications for communication platforms and services for pre-sales support, sales and service management, settlement, and virtual enterprises in an open trading environment.

SCOPES

The scope of the work encompasses all aspects of communication and information exchange in Electronic Commerce, including:

- Navigation, brokerage, advertising, and catalogue exchange in pre-sales activities.
- Negotiation and contract making protocols in interactions between consumers, businesses, and public administration.
- Secure exchange of documents, content and value in open trading protocols.
- Communication platforms for the e-Economy, including e-commerce, e-business and e-government.
- Application of mobile agent technology.
- Advanced devices and protocols for the support of mobility and the ubiquitous access to electronic markets.

WG6.12 – (joint with WG2.14/8.10, see TC2)
est. 2011, revised 2012
TC 7 - System Modeling and Optimization - Aims and Scopes
est. 1972

AIMS

- to provide an international clearing house for computational (as well as related theoretical) aspects of optimization problems in diverse areas and to share computing experience gained on specific applications;
- to promote the development of necessary high-level theory to meet the needs of complex optimization problems and establish appropriate cooperation with the International Mathematics Union and similar organisations;
- to foster interdisciplinary activity on optimization problems spanning the various areas such as Economics (including Business Administration and Management), Biomedicine, Meteorology, etc., in cooperation with associated international bodies.

SCOPES

Computational aspects of optimization problems arising in such areas as Aerospace, Biomedicine, Economics, Meteorology, and Public Services (Health, Environment, Police, Fire, Transportation, etc.).

Some specific examples are:

- on-line and off-line computational techniques in modelling and control of dynamic systems;
- trajectory analysis and computation;
- optimization of decentralized systems (macro-economic systems) and systems with multicriteria;
- optimization of resource allocation in urban systems;
- optimization of pollution-control systems;
- optimization of man-machine systems;
- optimization of power systems operation.

WG7.1 - Modeling and Simulation
est. 1972

AIMS

To foster cooperation and information interchange among those engaged in the simulation of large and complex systems including specialists in:

- Modelling and Identification Methodology;
- Simulation Methodology;
- Computer Simulation Languages;
- Interactive On-Line Computation;
- Hybrid Computation.

SCOPES

The work will include three major classes of problems:

- Environmental Systems
- Biological Systems
- Societal Systems

using various approaches such as:
new simulation languages for digital simulation;
new computer graphics techniques;
application of pattern recognition and feature extraction methods;
new mathematical techniques (e.g. finite elements);
new data base organisations and simulations of data bases.

WG7.2 - Computational Techniques in Distributed Systems
est. 1973

AIMS

To foster the international exchange of ideas and experience in the area of Computational Techniques with particular emphasis on distributed systems arising in diverse disciplines such as Mechanics, Economics, Biomedical Engineering, Geophysics, etc.

SCOPES

Computational Techniques for Identification and Optimal Control of Systems Modelled by Partial Differential Equations;

Computational Techniques for Structural Problems, Elasticity, Plasticity, etc., including various approaches such as: Finite Element Approximation Techniques, Decomposition Techniques, Interactive and Graphic Computer Techniques.

WG7.3 - Computer Systems Modeling
est. 1973

AIMS

The work of the Group is directed toward improving the art of analyzing and optimizing performance and costs of data processing systems through the use of analytical models.

SCOPES

- optimized allocation of resources (such as memory, telecommunication lines, computer power, and points of concentration and switching), in distributed information processing systems;
- analyses of throughput and response time;
- analyses of reliability in the presence of failures of hardware, software or telecommunications;
- analyses of CPU main memory and I/O channel scheduling and allocating procedures;
- analyses of storage systems including memory hierarchies and geographically distributed data bases;
- comparison with simulations and with performance indices measured experimentally.

WG7.4 - Inverse Problems and Imaging
est. 2014

AIMS

To foster cooperation between experts in the fields of inverse problems and imaging on the development of reliable and efficient reconstruction methodologies and the convergence analysis of algorithms. To also stimulate exchange with other working groups in TC7, e.g., on optimization and control methods, modelling with differential equations, and stochastic aspects.
SCOPES

A core topic of common interest of this working group is variational methods for solving inverse and imaging problems. The members of the working group additionally contribute to the technical committee their specific expertise on aspects related to these areas of, e.g., mathematical modelling, optimization techniques, partial differential equations, harmonic analysis, regularization techniques, parameter identification, recovery of interfaces, and stochastic noise modelling.

WG7.5 - Reliability and Optimization of Structural Systems
est. 1986

AIMS and SCOPES

Promote modern structural system reliability and optimization theory;

- Advance international cooperation in the field of structural system reliability and optimization theory;
- Stimulate research, development and application of structural system reliability and optimization theory;
- Disseminate and exchange the information on reliability and optimization of structural systems;
- Encourage education in structural system reliability and optimization theory.

WG7.6 - Optimization-Based Computer Aided Modeling and Design
est. 1989, revised 1999

AIMS

The Working Group 7.6 considers high-performance computer-aided systems to support modelling, decision analysis, optimization and multi-criteria decision making.

The Working Group is focused on

- Policy and Management (Application Focus)
- Optimization, Multi-Criteria Decision Analysis and Simulation (Methodological Focus)
- Design, Planning and Scheduling (Problem Type Focus)
- Modelling and Implementation of Intelligent Systems (Information Technology Focus)

SCOPES

Any methodological approach or combination of solution techniques, which solves real world problems successfully. Thus, the following problem types are examples of application areas in policy and management the WG will deal with:

- Network Design (Communication, Transportation, Traffic)
- Planning and Scheduling in Transportation Logistics
- Production Planning and Scheduling
- Environmental. Planning Problems
WG7.7 - Stochastic Optimization
est. 1989

AIMS

To foster international cooperation among experts in stochastic optimization, and to spread information about the achievements of the field into areas of possible applications.

SCOPES

Subject of this WG are all problems involving in an essential way stochastic components (variables or processes) and the task of optimizing functions. In particular this includes:

- Theoretical investigation of stochastic optimization models;
- Design, development and analysis of solution methods;
- Modelling practical problems by stochastic optimization problems, e.g. in agriculture, industrial production, finance, power systems, water reservoir management, and implementing stochastic optimization models into decision support systems.
TC 8 - Information Systems - Aims and Scopes

est. 1966, revised 1990

AIMS

To promote and encourage interactions among professionals from practice and research and advancement of investigation of concepts, methods, techniques, tools, and issues related to information systems in organisations.

SCOPES

The planning, analysis, design, construction, modification, implementation, utilization, evaluation, and management of information systems that use information technology to support and coordinate organisational activities including:

- effective utilization of information technologies in organisational context;
- interdependencies of information technologies and organisational structure, relationships and interaction;
- evaluation and management of information systems;
- analysis, design, construction, modification and implementation of computer-based information systems for organisations;
- management of knowledge, information, and data in organisations;
- information systems applications in organisations such as transaction processing, routine data processing, decision support, office support, computer-integrated manufacturing, expert support, executive support and support for strategic advantage plus the coordination and interaction of such applications;
- relevant research and practice from associated fields such as computer science, operations management, economics, organisation theory, cognitive science, knowledge engineering, and systems theory.

WG8.1 - Design and Evaluation of Information Systems

est. 1976, revised 1990 and 1992

AIMS

The planning, analysis, design and evaluation of information systems for organisations.

SCOPES

- Identify concepts and develop theories relevant to the planning, analysis, design and evaluation of information systems;
- Develop languages, techniques, tools and methods for applying these concepts and theories to the:
  - planning
  - requirements analysis and determination, and specification
  - design
  - evolution of information systems, and their verification, validation and overall evaluation;
- Develop methodologies for the analysis, evaluation and selection of information systems development methods;
- Take cognizance of relevant work from associated fields - such as computer science, software engineering, knowledge engineering, cognitive science, management science, organisation theory and systems theory - and apply the findings to the development of information systems.
WG8.2 - The Interaction of Information Systems and the Organization
est. 1977, rev. 2005

AIMS

- To develop integrative frameworks that facilitate recognition and transfer of relevant knowledge about the role and uses of IT. Such frameworks can be based on a wide range of disciplines. These frameworks should be open to all research traditions and lines of research which further the study of the uses of IT in organizational contexts, and can also include the critical questioning of their relevance for the scope and aims of WG 8.2.
- To build theories and generate evidence about the role and impact of IT in specific organizational contexts.
- To improve the ways and means by which organizations design, implement and maintain IT.
- To nurture a critical discourse about the role which IT plays in the lives of people as individuals and as members of complex social institutions such as government, community, business, professional societies and other forms of social associations.
- To engage in ethical discourse about the practices and dilemmas which arise in the development, use and consequences of IT, or in research about such technology.

SCOPES

Working Group 8.2 is concerned with the generation and dissemination of descriptive and normative knowledge about the development and use of information technologies in organizational contexts, both broadly defined. By information technology (IT), we mean technologies that can be used to store, transfer, process or represent information. By organizational context, we mean the institutional arrangements in which information is used or created. Descriptively, the WG seeks to generate and disseminate knowledge about and improve understanding of the role and impact of information technology across a range of social levels (society, organization, individual) and across a diversity of spheres (marketplace, workplace, home, community). Normatively, it seeks to improve the design and application of information technologies that are both useful and effective for individuals, groups, organizations and society at large.

WG8.3 - Decision Support Systems
est. 1981

AIMS

The development of approaches for applying information systems technology to increase the effectiveness of decision-makers in situations where the computer system can support and enhance human judgements in the performance of tasks that have elements which cannot be specified in advance.

SCOPES

To improve ways of synthesizing and applying relevant work from resource disciplines to practical implementations of systems that enhance decision support capability;

The resource disciplines include

- information technology
- artificial intelligence
- cognitive psychology
- decision theory
- organisational theory
- operations research and modeling.
WG8.4 - E-Business Information Systems: Multi-disciplinary research and practice

AIMS
To promote collaboration across disciplines in E-Business research and practice.

SCOPES
This working group provides a reference point and a focus for multi-disciplinary research and practice in E-Business. The intention is to extend the community’s focus on E-Business to recognize, acknowledge and facilitate research and practice as it crosses the boundaries of IS, organizational, consumer, community, industry and national domains.

Where researchers and practitioners focus on specific issues and technologies, e.g. smart-card developments, mobile technologies or organizational adoption of IT practices then that research is more properly located within existing working groups. Where that work is cross or multi-disciplinary it can be located here.

WG8.5 Information Systems in Public Administration
est. 1988

AIMS
To improve the quality of information systems in public administration at international, national, regional and local levels. The Working Group’s special emphasis is on the relationship between central and local use of information systems and the provision of citizen services, together with the accomplishment of social goals.

SCOPES
- analyse information processing policies in public administration;
- discuss specific applications of information systems in public administration;
- analyse the impacts of information systems on public administration;
- apply the results of other IFIP Working Groups, and specifically of TC 8 Working Groups, to public administration.

WG8.6 - Transfer and Diffusion of Information Technology
est. 1994

AIMS
To foster understanding and improve research in practice, methods, and techniques in the transfer and diffusion of information technology within systems that are developed and in the development process.

SCOPES
- Diffusion, transfer, and implementation of both mature and immature information technologies and systems in organizations and among organizations, sectors, and countries.
- Transfer of technology to be incorporated in systems for customers and clients.
- Transfer of both system and development technologies to technologists, developers, managers, and sponsors of systems.
- Development of frameworks, models, and terminology for information technology transfer and diffusion.
- Identification of risk factors and barriers to success in technology transfer and strategies for addressing them.
Conditions or scenarios under which specific transfer and diffusion techniques are applicable.
Methods to evaluate the efficiency, effectiveness, and value of technology transfer programs and approaches, including time and effort estimators and metrics.
Organization design and process issues related to technology transfer and diffusion.
Case studies of technology transfer and diffusion to provide instances to guide research, development, and practice.
Standards and intellectual property issues that inhibit or facilitate information technology transfer.

WG8.8 - Smart Cards
est. 1998, rev. 2001

AIMS

Smart cards are to be understood as personal, portable, flexible, secure tokens that form an integral part of a larger information infrastructure. Therefore the aims of WG 8.8 are:

- to encourage interaction between the numerous actors in the smart card area.
- to create a common and coherent approach of a specific methodology.
- to address the background technologies of component architectures; for example dedicated chips, security devices, memory management.
- to specify and design smart card operating systems.
- to identify and develop relationship between different themes of information systems and smart cards, for example promote the theme of smart cards as a widely distributed data base.
- to identify interfaces between smart cards as an active components of distributed systems and networks.
- to promote a global security analysis of information systems using smart cards.
- to investigate the field of applications of smart cards and propose a scheme for a design methodology.
- to create new models for information systems which use smart cards.
- to participate to advanced standardization discussions and propositions.

SCOPES

The study of smart cards as an innovative component of widely distributed systems. The scope includes all the aspects of smart cards design and applications:

- Technology with hardware, software and security specific requirements.
- Application design with a special emphasis on development methodology of distributed systems.
- Service providing including analysis of transactions, protocols and more generally speaking, the process of a top down design of smart cards projects.
- The interaction of smart card related technology with society, economics, public services and organizations.

WG8.9- Enterprise Information Systems
est. 2006, revised 2016

AIMS

- Provide a forum for international collaboration and dissemination of research and best practices in the enterprise information systems (EIS) area
- Establish close cooperation between academics and practitioners in the area of EIS
- Increase the impact of research and use development in the area of EIS
Study and share the results of methodologies, design, implementation and use of EIS and increase the efficiency of innovation

SCOPES

- Concepts, theories, techniques, and implementation relevant to enterprise information systems
- Management of Enterprise Information Systems
- Utilization of Enterprise Information Systems solutions in small and medium size enterprises, in the public sector and also in the supply chain environment
- Identification and sharing of best practices encountered in the use of present day EIS
- Integration of enterprise wide applications

WG8.10 – (joint with WG2.14/6.12, see TC2)
est. 2011, revised 2012

WG8.11/11.13 – Information Systems Security Research
est. 2010

AIMS

The aim of the working group is the creation, dissemination, and preservation of well-formed research about information systems security. While relevant for advanced practical development, our primary audience consists of researchers in this area. We value research products with highly reliable and validated theory, empirical data, or quantitative/qualitative social scientific methodology. The group’s activities will be workshop-based, and intended to nurture individual journal articles for submission to a wide variety of journals. Our workshops will produce notebooks that consist of formative working papers. We mainly target final publication venues in the management research journal communication system.

SCOPES

Anchoring to information systems means our research will attend and extend the social, organizational, and managerial literature in this area. While we assume an effective foundation in information security technology, we regard information systems risks broadly, for example crime, employee misconduct, warfare, terrorism, error, accident, natural events, etc. We also address information systems security broadly, for example, privacy, awareness, policies, strategy, audit, planning and control.
TC 9 – ICT and Society - Aims and Scopes

est. 1976, revised 2008, 2009

AIMS

The TC9 aims:

- To develop understanding of how ICT innovation is associated with change in society;
- To influence the shaping of socially responsible and ethical policies and professional practices.

SCOPES

The TC9 fosters multidisciplinary discourse into:

- The role of ICT in the change of particular domains of human activity, including work; the home and private life; governance.
- Ethical, political, economic and cultural dimensions of ICT innovation.
- Issues stemming from ICT innovation, such as gender, the phenomenon of virtuality, sustainable development.

WG9.1 - Computers and Work

est. 1977

AIMS

- to study and report on how computers have affected employment levels, job content and structure, working conditions, career patterns, and participation problems;
- to give an account of problems relating to computers and work, and of proposed measures for dealing with these problems;
- to encourage and support the design and development of systems which promote not only efficiency but provide job satisfaction, for example through interesting work and reduction of stress.

SCOPES

The effects of computerization on the lives of three distinct groups of person:

- computer professionals,
- users of computers,
- non-users affected by computers.

WG9.2 - Social Accountability

est. 1977, revised 2009

AIMS

- To provide an international forum for assessing the social consequences of ubiquitous Information and Communication Technologies (ICT) and its applications
- To promote the safe and socially beneficial development and use of ICT
To encourage a human-centred and inclusive approach in the design and implementation of ICT, together with responsible long-range planning
To foster academic discussion on the use of ICT in its capacity to enhance the quality of life

**SCOPES**

Those aspects of ICT development and implementation that impact on society in general and which affect the public interest in particular, such as:

- Privacy and confidentiality
- Inclusion, access for all, and choice
- Equality in system relationships
- User and IT professional education and awareness
- Social consequences of future technologies
- Ethical, legal and regulatory issues

---

**WG9.3 - Home-Oriented Informatics and Telematics**
est. 1988, revised 1989

**AIMS**

- Foster benevolent design, development, implementation, applications and use of Home-Oriented Informatics and Telematics (HOIT).
- Encourage surveys and studies on HOIT.
- Develop methodologies for studying social implications of HOIT.
- Establish a global platform for interaction, exchange, joint initiatives and cooperation between such groups as:
  - the end of users of HOIT: members of households
  - industrial developers and designers of HOIT technology and related services
  - implementation designers
  - policy, decision making, social and consultative bodies
  - architects and urban planners
  - scientists.

**SCOPES**

The social implications of informatics, communications and telematics in the home, the family and its environment (HOIT);

including:

- actual and potential human usefulness of HOIT;
- social impact of these technologies and their applications;
- developments of the underlying infrastructure;
- rationale in innovation and design processes;
- dynamics of technology development.

WG 9.3 explicitly cares about the position of and the potentials for vulnerable groups like children, less-educated, disabled, elderly and non-employed people, paid and non-paid workers at home, cultural minorities, unaware users and others.
WG9.4 - Social Implications of Computers in Developing Countries
est. 1989, revised 2007

AIMS

- to collect, exchange and disseminate experiences of information and communications technology (ICT) implementation in developing countries;
- to develop a consciousness amongst professionals, policy makers and public on social implications of ICT in developing nations;
- to develop criteria, theory, methods, and guidelines for design and implementation of culturally adapted information systems;
- to create a greater interest in professionals from industrialized countries to focus on issues of special relevance to developing countries through joint activities with other Technical Committees.

SCOPES

- national ICT policy issues;
- culturally adapted computer technology and information systems;
- role of transnational corporations, regional and international cooperation and self-sufficiency in informatics;
- social awareness of ICT and ICT literacy.

WG9.5 – Virtuality and Society

AIMS

The IFIP Working Group 9.5 (Virtuality & Society) sees information and communication technologies as being intertwined with society. In this sense, virtuality is taken as constituting both the social and the technical modes of existence. The aim therefore of this WG is to explore the globality of virtuality, the complex, emergent and changing nature of this field and to act as a location for transdisciplinary work on virtuality. Through workshops and conferences the WG will promote a dialogue and mutual exchange from a diverse set of disciplines such as computing, information systems, media studies, social theory and philosophy but also anthropology, organizational studies, gender studies, politics and ethics.

SCOPES

The scope of the working group is all aspects of virtuality as evident in a multiplicity of empirical sites and social phenomena. Given its scope, we welcome contributors from, but not limited to, the following areas:

- Ethics of virtuality
- Virtual media and art
- Computing games
- Telemedicine
- Internet studies
- Organizational Aspects of Virtuality
- Virtual politics and political web-sites
- Virtual reality
WG9.6/11.7 - Information Technology Mis-Use and the Law
est. 1990, revised 1992, 2001

AIMS

- To foster co-operation between the "Computers and Society" and "Information Security" communities on issues of "IT misuse and the law".
- To develop an understanding in IFIP committees and national bodies of:
  - threats associated with IT systems and the related legal concerns.
  - risks to people and organisations arising from these threats.
  - responsibilities of people and organisations arising from legal and other provisions for information security.
  - risks arising from incoherency between legal, technical and managerial provisions.
  - the impact of IT systems on the current law, e.g. (criminal and civil law) and potential problems.
- To propose and/or evaluate legal and other prescriptions to combat these threats and their associated risks.
- To engender information exchange on threats, their origins, and possible consequences.
- To propose and/or evaluate legal and other appropriate courses of action.

SCOPES

- Analysis of existing and emerging threats to IT systems security, and the associated risks to people, organisations and society.
- Analysis of security principles.
- Aspects of the law where the use or introduction of IT on a global scale has rendered the current law (and/or its interpretations) obsolete or obsolescent or made it unenforcable.
- Analysis of potential means of countering and mitigating threats, e.g. legal frameworks, ethical standards, managerial procedures, and other social factors applicable to behaviour and responsibilities in the context of IT systems.
- Possible solutions.
- New legal, social and organisational consequences of the development and use of IT systems.

WG9.7 - History of Computing
est. 1992

AIMS

- To provide a central vehicle for information interchange regarding the methods and techniques of historio-graphy, especially as related to the opportunities for the studies of contemporary history.
- To provide expertise for the design, implementation and operation of archives and displays related to the history of information processing.
- To encourage the development of national archives.
- To develop a program of "Pioneers' Days" which recognize the contribution of pioneers and anniversaries of major events.
- To identify pioneers worthy of an appreciation and distinction and make "IFIP Pioneer Awards".
- To develop publication plans for histories of Information Processing.
- To promote the inclusion of historical modules in appropriate curricula.

SCOPES

The history of computing and informatics with a view to providing the impetus to preserve the records and artifacts of information processing inventions, practices and activities throughout the world under the auspices of
IFIP and its constituent organizations. One special focus is the socio-historical context and consequences of Information Technologies.

WG9.8 Gender Diversity and ICT
est. 2001, 2009

AIMS

This WG is dedicated to research and action how different areas of society being transformed by computer technology with particular emphasis on changes in women's work and life and how these have come about. It is based on the integration of gender studies and computer science. Membership is open to both women and men.

In this context the WG aims

- to serve as an international, interdisciplinary communication forum and to hold discussions in workshops and conferences,
- to exchange women’s experiences as scholars and professionals in information technology,
- to integrate feminist perspectives into computer science,
- to develop an understanding in the IFIP communities and national bodies of the gendered aspects in design, realisation, and implementation of information systems,
- to propose and/or evaluate appropriate courses of action.

SCOPES

The topics cover the transitions from women’s traditional work to work based on modern technology, from communication within personal communities to virtual communities, from traditional gendered life to new gendered perspectives. Computerisation is understood in the narrow sense of computing systems as well as in the broader sense which includes the organisational, ethical, and social context of design and usage.

Discourses are linked to

- the analysis of the effects of computer technology on women’s status as citizens,
- the analysis of opportunities and risks of computerised technologies for women’s work in the paid labour force and in domestic spheres,
- the analysis of gender perspectives in the formative and constructive processes of computers and information systems,
- the analysis of gender in computing education and educational strategies for girls and women.

WG9.9 ICT and Sustainable Development
est. 2005

AIMS

- To contribute to the development of an information society that meets the human needs of the present without compromising the ability of future generations to meet their own needs.
- To be actively involved in the development of ICT applications which involve the goal of sustainable development.
- To investigate the interaction among social, environmental and economic issues in the development of ICTs and their applications.
- To promote worldwide research and practice for further advancement of ICT towards a safe and sustainable self developing World.
To strengthen interdisciplinary research efforts in technology assessment for ICTs with a focus on ICT-induced opportunities and risks for the individual, for social systems and for the global ecosystem.

To provide a platform for presenting and discussing emerging ideas and trends in the intersection of the topics 'information society' and 'sustainable development'.

To promote or support the organization of meetings as well as easy access to high-quality data, information and knowledge in this area and related areas.

**SCOPES**

- To create a network of experts working on ICT applications or implications related to sustainable development
- To support the coordination of policies related to information society issues with policies related to sustainable development
- To support applications of ICT for global environmental and development issues
- To facilitate research assessing the environmental and health impacts
  a) of ICT hardware life cycles; production, use, recycling and final disposal
  b) of ICT applications with respect to the resource efficiency of processes they influence
  c) of ICT-induced long-term changes of consumption patterns or lifestyles.
- To promote the communication between computer professionals and other experts on relationships between ICT and sustainable development
- To promote prospective studies to disseminate early warnings on consequences of applications of ICT that could compromise the goal of sustainable development, and encourage the development of strategies to ensure that ICT applications will contribute to sustainable development.

**WG9.10 ICT Uses in Peace and War**
est. 2013

**AIMS**

The aim of this working group is to focus the efforts of academia and research institutions, industry, governments, civic society, and the military to promote creative thinking in this field and to encourage viable solutions to so-far unanswered questions. This group will encourage dialogue by providing a platform for the presentation of research papers, current research or the result of research in progress, case studies, use cases, lessons learned, and risk assessment/impact assessment.

**SCOPES**

The scope of the working group includes any aspects that pertain to how ICT may influence, affect, or threaten individuals, society or nations in relation to either war or peace, as well as how these concerns are perceived by these three levels of grouping (persons, society or nations).

The following themes are all relevant in terms of their orientation in their use in war and peace. The items which are listed in alphabetic order do not reflect the eventual prioritization of the subjects to be covered:

- Cyber warfare
- Cyber security awareness
- Forensic applications and solutions
- Governance and standards
- Hacking, cracking and other technical challenges
- ICT, critical infrastructure and society
- Social aspects of critical infrastructure protection
ICT strategies from a holistic, peaceful, and humane perspective
ICT uses to prevent conflicts and contribute to peace
ICT uses from a military perspective
Legal, ethical and social issues related to information security
Promotion of democratic practices through ICT uses
Social networking
Socio-technical aspects of ICT uses in peace and war
Strategic information security
Vulnerability assessments
Research and education on the impact of ICT in peace and war

While it is anticipated that this working group will build associations with other working groups in TC9, and possibly with working groups in TC11 or TC3, it is also feasible that it could become associated with work undertaken by such international and national associations as the International Telecommunications Union, United Nations and UNESCO.
TC 10 - Computer Systems Technology - Aims and Scopes

est. 1976, revised 1987

AIMS

The Aims of the Committee are the promotion of the State-of-the-Art and the coordination of information exchange on concepts, methodologies, and tools in the stages in the life cycle of computer systems.

SCOPES

- system and component concepts, architecture and organisation;
- specification, design and verification methodologies of computer systems;
- logical design and fabrication of components and systems;
- evaluation of the parameters of computer systems and components;
- reliability;
- assessment of emerging technologies;
- application specific computer systems and components including peripherals.

WG10.2 – Embedded Systems

est. 2006

AIMS

The WG10.2 shall be constituted as a group under the sponsoring organization with the following basic aims:

- to be the internationally open reference group for all aspects of embedded system design promoted and sponsored by the sponsoring organization of the WG10.2:
- to further the dissemination and exchange of information and experience on research and applications in the area of embedded systems;
- to address ES designers and researchers from both, industry and academia;
- to encourage education in all areas of embedded systems;
- to further the interdisciplinary character of embedded systems, that encompasses hardware (system on a chip), real-time software, real-time operating systems, control theory, intelligent features, dependability issues.

SCOPES

Embedded systems are gaining increasing importance in all aspects of engineering. It is expected that in the near future roughly no technical artifact will exist without embedded information technology. There is a tendency to software oriented embedded and/or dependable systems, based on standardized micro-controller cores. This implies that the design of embedded real-time software and real-time operating systems will play a dominant role in this field. As more and more networks of micro-controllers are applied, real-time communication systems and in general the design of distributed embedded systems will gain importance. As high-performance embedded computing components have become available the challenges of designing embedded systems have become more acute.

The scope of WG10.2 comprises in detail to:

- organize events in the area of ES (e.g. DIPES (Distributed and Parallel Embedded Systems));
- seek co-operation with user and interest groups as well as with ES-oriented groups within IFIP and other societies;
- discuss, disseminate and exchange information on ES-related standardization activities;
- study and encourage curricula on ES design;
- initiate and organize new ES-related activities.
WG10.3 - Concurrent Systems
est. 1978, revised 1979, 1988, 2006

AIMS

The study of computer systems, having several computing elements, with the goal of improving the quality of attributes such as cost, performance, programmability, extendability and functionality.

The study includes the interrelation software/firmware/hardware in specification, design and implementation.

SCOPES

- Exploration of problem areas and solutions pertaining to the interrelation between the hardware functions and the software functions in systems such as supervisors, data management, language translators, I/O systems, and user interfaces.
- Evaluation of the implementation of trends in computer systems technology on the interrelation of software, firmware and hardware.
- Evaluation of the implication of this interrelation in the trends in computer systems technology.

WG10.4 - Dependable Computing and Fault Tolerance
est. 1980, revised 1988

AIMS

Increasingly, individuals and organizations are developing or procuring sophisticated computing systems on whose services they need to place great reliance. In differing circumstances, the focus will be on differing properties of such services - e.g. continuity, performance, real-time response, ability to avoid catastrophic failures, prevention of deliberate privacy intrusions. The notion of dependability, defined as that property of a computing system which allows reliance to be justifiably placed on the service it delivers, enables these various concerns to be subsumed within a single conceptional framework. Dependability thus includes as special cares such attributes as reliability, availability, safety, security. The Working Group is aimed at identifying and integrating approaches, methods and techniques for specifying, designing, building, assessing, validating, operating and maintaining computer systems which should exhibit some or all of these attributes.

SCOPES

Specifically, the Working Group is concerned with progress in:

- understanding of faults (accidental faults, be they physical, design induced, originating from human interaction; intentional faults) and their effect;
- specification and design methods for dependability;
- methods for error detection and processing, and for fault treatment;
- validation (testing, verification, evaluation) and design for testability and verifiability;
- assessing dependability through modelling and measurement.

WG10.4 SIG on Education in Resilient Computing
est. 2009

AIMS

The primary aims of the SIG are:
To acquire knowledge on how Resilient Computing is taught today in different worldwide higher educations institutions;
To compare the experiences so to provide an incremental process towards the structuring of an educational track in Resilient computing;
To promote the outcomes of the SIG to update or change or start proper tracks in Resilient Computing in higher educations institutions;
To interact with international bodies working on educational issues i.e. ACM, IFIP, etc., to present the outcomes of the SIG;
To collect and make accessible, through the web, support material useful to cover the several disciplines relevant to Resilient Computing
To build and maintain a comprehensive database of material, available to the community of students, scientists, industrial designers and regulatory bodies

SCOPES
The adjective resilient has been in use for decades in the field of dependable computing systems essentially as a synonym of fault-tolerant, thus generally ignoring the unexpected aspect of the phenomena the systems may have to face. These phenomena become of primary relevance when moving to systems like the future large, networked, evolving systems constituting complex information infrastructures – perhaps involving everything from super-computers and huge server "farms" to myriads of small mobile computers and tiny embedded devices, with humans being central part of the operation of such systems. Such systems are in fact the emergence of the ubiquitous systems that will support Ambient Intelligence.

From an educational point of view, very few Universities, if any, are offering a comprehensive and methodical curriculum that is able to provide students with a multi-disciplinary preparation that makes them able to cope with the challenges posed by the design of ubiquitous systems. Multi-disciplinarily spans over dependability, security, usability, human factors, legal issues and ethics. Thus, from the educational point of view there is the need to scale-up the spectrum of topics offered, to identify the best curricular structure to make successful both teaching and learning processes.

It is thus relevant to have an open worldwide forum in which the different educational approaches to teaching Resilient Computing are presented, compared and discussed to reach an agreed approach to this issue.

In addition it will be very valuable to collect together in an open and public database all available support material (as lecture’s slides, textbooks, relevant literature, links to useful sites, etc.) that covers the different facets of multi-disciplinarily.

A first attempt to offer to our community a proposal for an MSc curriculum in Resilient Computing and gather extended support material has been done very recently in a European Network of Excellence ReSIST; the material is accessible at http://resist.isti.cnr.it/home.php.

---

WG10.4 SIG on Concepts and Ontologies
est. 2009

AIMS

1. To take part in the development of the updated Computing Classification System (CCS) that is undertaken by the ACM to assure that our domain of interest is properly represented, since that was not the case in the two previous versions (1988 and 1998) of the CCS.
2. To develop a thesaurus and an ontology that integrates the concepts of dependability, security, resilience, robustness, trustworthiness, survivability, high confidence, information assurance, self-healing (and possibly other related terms) and identifies their similarities and differences.
3. To employ document clustering algorithms and other classification techniques in order to create a methodology for automatic identification of related documents from all the domains listed in Aim 2 above. To use the methodology in developing automatic tools that assist researchers and referees in creating and evaluating new research results.
4. To use advanced natural language processing (NLP) tools and to collaborate with artificial intelligence experts of the computational linguistics and knowledge representation domains in the pursuit of the above Aims 2 and 3.
5. To use our experience in order to promote the formation of an IFIP activity aimed to create a thesaurus, an ontology and a classification system for the entire field of informatics (computer science and engineering), possibly in collaboration with the ACM.

SCOPES

Dependability has naturally concerned most disciplines of computer science and engineering (informatics) since the early days. As a consequence, significantly different terminologies were developed by different communities to describe the same aspects of dependability. The terminologies became entrenched through usage at annual conferences, in books, journals, research reports, standards, industrial handbooks and manuals, patents, etc.

As an illustration, we have the concepts of dependability, security, trustworthiness, survivability, high confidence, resilience, information assurance, robustness, self-healing, etc., whose definitions appear to be identical or to overlap extensively. In many cases the definitions themselves have multiple versions that depend on a given author’s preference.

An example of a long-term effort to create a framework of dependability and security concepts is the effort within IEEE CS TC/DCFT and IFIP WG 10.4 that since a special session at FTCS-12 in 1982 has resulted in a series of papers, a six-language book, and in 2004 a "Taxonomy" paper in vol.1, no.1 of the IEEE Transactions on Dependable and Secure Computing. No other community has produced such a taxonomy.

The description of a domain by several synonyms or near-synonyms that lack well-defined distinctions is a source of continuing confusion that leads to re-inventions and plagiarism, impairs the transfer of research results to practical use in industry and impairs the recognition of related documents.

The orderly progress of dependability research and its practical applications requires that past work as well as new results should be classified on the basis of a single ontology and thus made accessible to the entire profession. However, it is unreasonable to expect that a committee formed by the different communities could by volunteer effort create a taxonomy document from which a single consensus ontology could be generated.

It must be concluded that today the purely “intellectual” (i.e., human) process of ontology building for dependability concepts is reaching its limits. The complementary solution is to augment the human effort by the use of automatic natural language processing tools that have been developed by computer linguists. The next step must be computer-aided building of a consensus ontology.

During the past decade much progress has been made in the development of computer tools for human language processing. Such tools have been developed for the extraction of term candidates from a corpus (set of texts). A thesaurus (list of important terms with related terms for each entry) is constructed from the term candidates. The ontology for a given domain is a data model that represents those terms and their relationships. Automatic indexation of the texts is carried out using the thesaurus, followed by clustering analysis using statistical and linguistic techniques. A measure of similarity between texts is computed that serves as a basis for automatic classification. The applicability of the above listed techniques to texts in the dependability domain has been part of research supported by the European Network of Excellence ReSIST (Resilience for Survivability in Information Society Technologies) in 2006-2009.

The corpus is composed of the texts of nearly 2000 papers presented at all 29 FTCS and 7 DSN conferences (1971-2006). The encouraging results of the processing of texts from the FTCS/DSN community leads to the conjecture that similar processing of texts from other conferences, journals, books, industrial documents, etc., will produce other ontologies that can be merged into a consensus ontology that covers the entire domain of dependability and its near-synonyms.

A dependability ontology is an integral part of an (still non-existent) ontology for all of computer science and engineering. The only existing and widely used taxonomy that could be used to build it is the ACM Computing Classification System (CCS). The CCS was created in 1988 and was last revised in 1998. It has fallen far behind the evolution of CS&E and information technology. The concepts of dependability are treated very inadequately, and many significant dependability terms are altogether missing in the 1998 ACM CCS taxonomy.

The coming update of the CCS is a challenge to the dependability community: we must take part in the process of creating an up-to-date and evolvable version of the CCS that adequately incorporates dependability concepts. The new CCS would allow the computer-aided construction of a thesaurus and an ontology for the entire CS&E profession. However, a consensus dependability ontology with explicit synonymy relations must be available to the CCS builders.

Finally, it is very appropriate for IFIP to take part in the building of a CCS. The experience of the SIG can serve as a starting point for such an effort within IFIP.
AIMS

Electronic system design demands a tight integration on a very large profile of knowledge and skills ranging from hardware and software system architecture to semiconductor physics. Functionality of complex embedded or stand-alone systems, to be applied in areas such as general-purpose computing, telecommunications, automotive, entertainment, and multimedia, may be realized by various combinations of analog and digital hardware and software parts. Systems can be implemented by single or multiple integrated circuits and software modules that can be either of special purpose, programmable or reconfigurable. The working group aims at providing a forum amongst creative experts to explore problem areas and solutions for the design of such complex electronic systems and also disseminating the solutions to a broader industrial and educational sphere.

SCOPES

The Working Group is interested in a broad range of topics related to the design and engineering of heterogeneous systems, containing hardware, software, and even mechanical parts.

- System Design Methods
- Embedded Systems
- Modeling and Specification
- Design Validation
- Formal Methods in Design
- Synthesis
- Design Environments
- Reconfigurable Computing
- VLSI Systems and Applications
- Physical Design
- Test and Testability
- Power-aware Design
- Analog and Mixed-Signal Systems
- Fundamental CAD Algorithms
TC 11 - Security and Privacy Protection in Information Processing Systems - Aims and Scopes

est. 1984, revised 2006, 2009

AIMS

To increase the trustworthiness and general confidence in information processing and to act as a forum for security and privacy protection experts and others professionally active in the field.

SCOPES

Work towards:

- the establishment of a common frame of reference for security and privacy protection in organizations, professions and the public domain;
- the exchange of practical experience;
- the dissemination of information on and the evaluation of current and future protective techniques;
- the promotion of security and privacy protection as essential elements of information processing systems.
- The clarification of the relation between security and privacy protection.

WG11.1 - Information Security Management

est. 1985, revised 1992

AIMS

As management, at any level, may be increasingly held answerable for the reliable and secure operation of the information systems and services in their respective organizations in the same manner as they are for financial aspects of the enterprise, the Working Group will promote all aspects related to the Management of Information Security.

These aspects cover a wide range, from purely managerial aspects concerning Information Security, (like upper management awareness and responsibility for establishing and maintaining the necessary policy documents), to more technical aspects (like risk analysis, disaster recovery and other technical tools) to support the Information Security management process.

SCOPES

- to study and promote methods to make senior business management aware of the value of information as a corporate asset, and to get their commitment to implementing and maintaining the necessary objectives and policies to protect these assets
- to study and promote methods and ways to measure and assess the security level in a company and to convey these measures and assessments to management in an understandable way;
- to research and develop new ways to identify the Information Security threats and vulnerabilities which every organization must face;
- to research and identify the effect of new and changed facilities and functions in new hardware and software on the management of Information Security;
- to study and develop means and ways to help information security managers to assess their effectiveness and degree of control;
- to address the problem of standards for Information Security.
STATEMENT OF CASE

There is a growing trend for senior business management to be held answerable for the reliable and secure operation of their information systems, as they are for control of their financial aspects. Information Security is, and should always be upper management responsibility. Information security professionals, and WG 11.1 in particular, should therefore be responsible for the development of all types of tools, mechanisms and methods to support top management in this new responsibility.

WG11.2 – Pervasive Systems Security

AIMS

To investigate methods and issues in the area of information security related to pervasive systems; and to advance knowledge and awareness of the subject through publications, conferences and other means. The aim is to address pervasive systems security from both a functional, technical, and societal perspective.

SCOPES

The scope of the working group shall be to:

- Promote the design of the new information security techniques and methods in pervasive systems.
- Investigate and report on the information security aspects of information technology products and information services for pervasive systems.
- Design guidelines and promote methodologies for the implementation of information security in pervasive systems.
- Investigate intelligent token and smart card applications in information security with the aim of making the user less dependent on single fixed environment.
- To foster public debate on the security and privacy issues that emerge when pervasive systems are deployed on a large scale.

STATEMENT OF CASE

Pervasive systems shall be defined to be large scale systems that are comprised of nodes ranging from RFID tags, through embedded systems, to personal mobile devices, interconnected by a mixture of short range wireless and wide are wired networks. The typical characteristics of a pervasive system are: resource constrained nodes, often physically unreachable or without user interface, whose interconnections often span a large number of administrative domains with conflicting interests. Security of such systems is therefore an emergent property.

WG11.3 - Data and Application Security and Privacy
est. 1987, revised 2001, 2011

AIMS

To promote wider understanding of the risks to society of operating data management systems that lack adequate measures for security or privacy.

To encourage the application of existing technologies for enhancing the security and privacy of data management systems.
SCOPES

To advance technologies that support:

- the statement of security and privacy requirements for data management systems;
- the design, implementation, and operation of data management systems that include security and privacy functions; and
- the assurance that implemented data management systems meet their security and privacy requirements.

WG11.4 - Network & Distributed Systems Security

AIMS

- To study and promote internationally accepted processes which will enable management and technicians to fully understand their responsibility in respect of the reliable and secure operation of the information networks which support their organizations, their customers or the general public.;
- To study and promote education and training in the application of security principles, methods, and technologies to networking.

SCOPES

The scope of the working group is:

- To promote the awareness and understanding of the network aspect of information systems security.
- To provide a forum for the discussion, understanding and illumination of network security matters.
- To study and identify the managerial, procedural and technical aspects of network security; and hence to define the network security issues.
- To study and describe the risks that arise from embedding an information system in a network environment.
- To advance technologies and practices that support network security controls, make possible the statement of requirements for network security, and in general, advance the foundation for effective network security.
- To contribute, as feasible and appropriate, to international standards for network security.

STATEMENT OF CASE

Management in any organization is responsible for the reliable and secure operation of the information systems that support the organization. As inter and intra-organization networking between information systems become the rule as well as the daily operational environment, the scope of concern takes on new aspects and new technical details come into play.

Management must not only address the security issues of wholly internal systems together with any networks to which they might be connected, but also must assure that the protective mechanisms installed in them are not accidentally or intentionally thwarted or subverted by other systems with which data exchange connections are established.

The range of subjects includes local area networks, regional and wide area networks, homogeneous and heterogeneous networks, and the networks which can arise for varying periods of time as a result of operational requirements for temporary or semi-permanent interconnections which can exist for varying periods of time.

Such networks will include dial-up or other connections which permit an organization's employees to work from their homes, and those external connections enabling organizations to transact mutually linked business activities e.g. such as will take place under EDI agreement.
WG11.5 – IT Assurance and Audit
est. 2013

AIMS

The aim of the Working group (hereinafter referred to as WG) as part of TC-11 is to study and develop detailed knowledge on IT assurance and audit models, standards, processes and techniques to meet the needs of organizations from a wider business perspective. The WG provides professionals operating in the field thorough insight into the IT audit function in financial reporting and compliance, and offers pragmatic ideas, approaches, instruments, guidelines and tooling that contribute to responsibly utilizing a demand driven way of IT assurance in addition to the existing and common practices.

Although the application and benefits of IT assurance and audit services are definitely in no doubt, it is essential to advance these necessary products to the next and more actual and mature level with a broad organizational focus that also possesses a risk and future based characteristics

SCOPES

The following topics are initially part of the WG:

- IT audit in financial statement review.
- IT assurance reporting standards.
- IT risk management and Enterprise Risk Management (ERM)
- Continuous assurance and audit.
- Information assurance.
- Software assurance.
- Governance, Risk and Compliance (GRC).
- Service assurance tooling.

The WG seeks collaboration with other working groups inside and outside IFIP. Examples include, but are not limited to, Information Systems Audit and Control Association (ISACA).

WG11.6 – Identity Management
est. 2006

AIMS

The aim is to promote through education, research and outreach, the awareness and understanding of:

1. Identity management in general, and, in this context:
   - identity management applications and methodologies;
   - optical and electronic document security;
   - potential and actual role and function of biometrics in particular;

2. Methods and techniques that can help to evaluate (specific) biometric technologies;
   - operational aspects of biometrics;
   - legal aspects of the application of biometrics;
   - impact of biometrics on society;
   - methods and techniques that can help to improve the quality of biometric technology (performance, privacy, compliance); and

3. National identity management in particular:
   - national identity management as (a kind of) federated identity management;
   - national identity management as a part of multilateral identity management;
   - (possible) role and effectiveness of identity management in fighting (inter)national fraud, crime and
terrorism;
- methods and techniques that can help to improve the quality of national identity management.

**SCOPES**

1. To establish and expand a common *identity management lexicon* so that the international community speaks the same language.
2. To propose, define and evaluate identity management applications and methodologies that will meet the standards of decision-makers in the public and private sector.
3. To propose, define and evaluate optical and electronic document security technologies that will meet the standards of decision-makers in the public and private sector.
4. To propose, define and evaluate biometric technologies and methodologies to be incorporated in (national) identity management that will meet the standards of decision-makers in the public and private sector.
5. To promote through education, research and outreach, a wider understanding of the legal, social and operational issues related to (national) identity management in general and the technologies mentioned above in particular.
6. In order to promote discussion related to research in the field, WG 11.6 will foster cooperation between:
   - International communities
   - Stakeholders, scientists and industry.
   - Technicians, sociologists, biologists, philosophers, psychologists and political scientists.

**WG11.8 - Information Security Education**
est. 1991

**AIMS**

To promote information security education and training at the university level and in government and industry.

**SCOPES**

The scope of the working group shall be to:

- establish an international resource center for the exchange of information about education and training in information security.
- develop model courses in information security at the university level.
- encourage colleges and universities to include a suitable model course in information security at the graduate and/or undergraduate level in the disciplines of computer science, information systems and public service.
- develop information security modules that can be integrated into a business educational training program and/or introductory computer courses at the college or university level.
- promote an appropriate module about information security to colleges and universities, industry and government.
- collect, exchange and disseminate information relating to information security courses conducted by private organizations for industry.
- collect and periodically disseminate an annotated bibliography of information security books, feature articles, reports, and other educational media.
WG11.9 - Digital Forensics
est. 2004

AIMS

The aim of the IFIP WG11.9 group is to promote through education, research and outreach, the awareness and understanding of (i) the scientific methods and techniques that help to tell about a computer related security incident (including those that involve converging digital technology), what occurred, when it occurred, how it occurred, what resources were affected and who initiated the incident, in a manner that will support a legal action, and (ii) the operational and legal aspects of new and emerging digital technology so as to help develop such methods and techniques.

SCOPES

- To establish and expand a common digital forensics lexicon so that international community speaks the same language.
- To propose, define and evaluate core technologies that assist in the discovery, explanation and presentation of conclusive and persuasive digital evidence that will meet the heightened scrutiny of the courts and other decision-makers in military and civilian environments.
- To promote through education, research and outreach, a wider understanding of the legal, social and operational issues related to digital forensics.
- To foster cooperation between international communities so as to promote scholarly discussion related to digital forensic research and its application.

---

WG11.10 – Critical Infrastructure Protection
est. 2006

AIMS

The principal aim of IFIP WG 11.10 is to weave science, technology and policy in developing and implementing sophisticated, yet practical, solutions that will help secure information, computer and network assets in the various critical infrastructure sectors. Information infrastructure protection efforts at all levels – local, regional, national and international – will be advanced by leveraging the WG 11.10 membership’s strengths in sustained research and development, educational and outreach initiatives.

SCOPES

- To identify information security challenges and implementation issues that are common (as well as unique) to infrastructure sectors.
- To elucidate the interdependencies existing between infrastructure sectors and their information security implications.
- To identify core security principles and techniques that can be applied to address problems in information infrastructure protection.
- To develop sophisticated information infrastructure protection solutions that blend scientific methods, engineering techniques and public policy.
WG11.11 – Trust Management  
est. 2006

AIMS

Working Group 11.11 aims to provide a forum for cross-disciplinary investigation of the application of trust as a means of establishing security and confidence in the global computing infrastructure, recognizing trust as a crucial enabler for meaningful and mutual beneficial interactions. The working group will bring together researchers with an interest in complementary aspects of trust, from both technology oriented disciplines and the field of law, social sciences and philosophy. In this way the working group will provide the common background necessary for advancing towards an in-depth understanding of the fundamental issues and challenges in the area of trust management in open systems.

The main membership will most likely be specialized researchers, both from universities and company laboratories. Government organizations and IFIP member societies and their members will be the main users of the results of the group.

Working Group 11.11 has a link to the area of other groups, both inside and outside IFIP and the group will seek actively for close cooperation with these groups.

SCOPE of the working group (non-exhaustive and non-exclusive):

- semantics and models for security and trust;
- trust management architectures, mechanisms and policies;
- trust in e-commerce, e-service, e-government;
- trust and privacy; (link with wg 9.6 / 11.7)
- identity and trust management; (link with wg 11.6)
- trust securing digital as well as physical assets;
- social and legal aspects of trust (link with wg 9.6 / 11.7)

WG11.12 – Human Aspects of Information Security and Assurance  
est. 2010

AIMS

The Human Aspects of Information Security and Assurance Working Group seeks to promote all aspects of research that can better support and inform our use of security within information systems.

SCOPES

The scope of the WG11.12 includes any aspects that pertain to the attitudes, perceptions and behavior of people, and how human characteristics or technologies may be positively modified to improve the ease of use and level of protection provided. Indicative themes within this remit will include:

- Information security culture
- Awareness and education methods
- Enhancing risk perception
- Public understanding of security
- Usable security
- Psychological models of security software usage
- User acceptance of security policies and technologies
- User-friendly authentication methods
- Automating security functionality
- Non-intrusive security
- Assisting security administration
- Impacts of standards, policies, compliance requirements
Organizational governance for information assurance
- Simplifying risk and threat assessment
- Understanding motivations for misuse
- Social engineering and other human-related risks
- Privacy attitudes and practices
- Computer ethics and security

It is anticipated that the activity of this Working Group will have many cross-disciplinary aspects with other groups, both inside and outside of IFIP and the group will actively seek close cooperation.

WG11.14 – Secure Engineering
est. 2013

AIMS
The Working Group 11.14 aims to provide a forum for cross-disciplinary investigation of “secure services engineering” with attention also at the software-services and system aspects. The working group will bring together researchers with an interest in several area of computer science, including, security, security engineering, service engineering, software engineering, formal methods and related fields. The WG will leverage on the experience and community developed by the NESSoS Network of Excellence (www.nessos-project.eu) on Engineering Secure Future Internet Software Services and Systems.

We can list the main aims as:

- The creation of a long lasting research community on engineering secure services and software systems.
- Maintaining a research roadmap in the area of secure service engineering.
- Maintaining a workbench for secure service engineering tools.
- Contribution to education, training, dissemination.
- Reduction of gap between industry and research best practices.

SCOPES
The main membership will most likely be specialized researchers, both from universities and corporate laboratories. Government organizations and IFIP member societies and their members will be the main users of the results of the group.

Working Group 11.14 has a link to the area of other groups, both inside and outside IFIP (as the ERCIM WG on security and trust management) and the group will seek actively for close cooperation with these groups.

Scope of the working group

- Security requirements engineering
  - Emphasis on identity, privacy and trust
  - Requirements languages for managing legislative constraints and socio-technical and economic aspects
  - Conflicts resolution between security requirements and other requirements
  - Privacy requirements engineering

- Secure Service Architectures and Design
  - Reasoning about security in multi-concern design models
  - Security design patterns
  - Support for model-driven security dynamic adaptation
  - Integrate security modelling in domain-specific modelling languages

- Security support in programming environments
  - Service creation
    - Security support for service creation (by composing services or by programming new services from scratch)
  - Service execution
- Security enforcement at runtime
  - Middleware
    - Monitoring of business compositions
  - Secure service programming
    - Adherence to programming principles and best practices
    - Verifiable concurrency
  - Platform support for security enforcement
    - Secure cross domain interactions
    - Finely grained execution monitoring
    - Supporting security assurance for FI services

- Service composition and adaption
  - Evolution of security contracts during the whole life of software
  - Trustworthy market of composable services
  - Assessing risk of a service composition
  - Test-bed for comparing service adaptation by contracts approaches

- Runtime verification and enforcement
  - Run-time monitoring of data flow
  - Usage control properties monitoring

- Risk and Cost-aware Secure Service Development
  - Risk and cost analysis process: towards incremental and iterative process through Secure Service Development
  - Risk composition and aggregation
  - Risk and cost evolution
  - Risk validation and integration
  - Applying formal methods to risk management
  - Runtime re-configurability of security based on risk management

- Security assurance for services
  - Early assurance
    - Step-wise refinement of security (from policies down to mechanisms)
    - Formal verification of security policies models
    - Certification and audit frameworks for scenarios involving outsourcing of services
  - Implementation assurance
    - Secure programming
    - Security testing and debugging
    - Penetration testing (specially model-based penetration testing)
    - Automatic generation of test for web applications
    - Debugging
    - Secured session management for web service security

- Quantitative security for assurance
  - Formal security metrics
  - Metrics for privacy and isolation in cloud computing
  - Validation and comparison frameworks for security metrics
  - Compositional calculation in service-oriented systems
TC 12 - Artificial Intelligence - Aims and Scopes

est. 1989, revised 1991, 2004

AIMS

- To foster the development and understanding of Artificial Intelligence and its applications worldwide.
- To promote interdisciplinary exchanges between Artificial Intelligence and other fields of information processing.
- To contribute to the overall aims and objectives and further development of IFIP as the international body for Information Processing.

SCOPES

Artificial Intelligence covers a wide range of techniques, which can be applied to a very wide range of application areas. Its subfields include (but are not restricted to) the following:

- Automated Reasoning
- Belief Revision
- Case-Based Reasoning
- Computer Vision
- Constraint Satisfaction
- Data Mining
- Evolutionary Algorithms
- Intelligent Agents
- Intelligent Planning and Scheduling
- Intelligent Robotics
- Knowledge Acquisition
- Knowledge Discovery and Data Mining
- Knowledge Engineering
- Knowledge-Based Systems
- Knowledge Management
- Knowledge Representation and Reasoning
- Machine Learning
- Machine Translation
- Model-based Reasoning
- Natural Language Processing
- Neural Nets
- Pattern Recognition
- Qualitative Reasoning
- Search
- Semantic Web
- Temporal Reasoning

WG12.1 - Knowledge Representation and Reasoning

est. 2004

AIMS

To study and develop theory and techniques for knowledge representation and reasoning.

SCOPES

The scope of the Working Group's activities includes (but is not restricted to) the following:
WG12.2 - Machine Learning and Data Mining  
est. 2003, revised 2005

AIM

To explore computer methodology and algorithms that improve automatically through experience. Applications range from data mining programs that discover general rules in large data sets, to information filtering systems that automatically learn users' interests.

SCOPES

- Concept Learning and Inductive Learning
- Association Rules
- Case-based Learning
- Artificial Neural Networks
- Bayesian Learning
- Uncertainty Learning
- Reinforcement Learning
- Evolutionary Learning
- Perceptual Learning
- Computational Learning Theory
- Population-based Learning
- Data Mining
- Application Case Study

WG12.3 - Intelligent Agents  
est. 2003

AIMS

To study and develop theory and techniques for intelligent agents.

SCOPES

- Theory and agent modeling
Agent architectures
Agent-based software engineering
Coordinating, cooperation and negotiation
Evolution, adaptation and learning
Multiple agents
Mobile agents
Agent-based grid computing
Agent-based applications

WG12.4 - (joint with WG2.12, see TC2)

WG12.5 - Artificial Intelligence Applications
Est. 1993, rev. 2003

AIMS
To explore the use of Artificial Intelligence techniques for applications development.

SCOPES
All areas of application in which Artificial Intelligence techniques can give benefits to users.

Techniques for application development including:
- Conceptual frameworks for application specification and design
- User interface design
- Integration of AI software and systems with conventional databases, programming languages, and operating systems
- Related research issues such as knowledge acquisition, learning, validation and implementation techniques.

WG12.6 - Knowledge Management
Est. 1993, revised 2003, 2008

AIMS
- To develop advanced methods for organizing, accessing and exploiting multidisciplinary knowledge within organizations and enterprises.
- To bring together various areas of KM research and technology to meet this challenge, e.g. knowledge transfer and modeling, optimisation, natural language understanding, speech and image processing and understanding, reasoning methods, learning methods, communication methods, social aspects, complex problem solving, decision support, human-machine interaction, serious games.
- To develop technology for intelligent support of Knowledge Cultivators, e.g. intelligent knowledge navigation systems, multi modal interface, automatic translation, competency management, e- and m-activities such as learning, collaborative research and design, business, process control.
- To share worldwide experience in the above domains.

SCOPES
Methodology, technologies, processes, and systems for supporting all aspects of knowledge management as communication, collaboration, learning, innovation, decision making, investigation, embedding and archiving.
Knowledge thinking.

Knowledge Holonomy – the interplay between individual, organizational, enterprise and society levels. Cross organisational.

Technology trends include:

- Intelligent multimodal knowledge acquisition and retrieval
- Knowledge discovery
- Technology for sustainable development
- Convergence of intelligences
- Technology for Knowledge Innovation
- Human machine interaction and collaboration
- Virtual reality and Games for KM

WG12.7 – Social Networking Semantics and Collective Intelligence
est. 2010

AIMS

- To become a multidisciplinary group that searches for and studies the theoretical foundations, new paradigms, methodologies and technologies needed for the specific support by intelligent computer systems of the knowledge aspects of social processes, community-based elicitation and specification of semantics, and the use of such knowledge e.g. as linked data in applications;
- To investigate and promote the applications of such systems in science, industry, and society at large, including opportunities for standardisation;
- To meet and communicate regularly, to endorse and create scientific forums of exchange in order to achieve these aims;
- To interact productively with selected other working groups and research projects within and outside of IFIP, in particular but not limited to TC2 (Software Theory and Practice), TC5 (Information Technology Applications), TC8 (Information Systems) and other Working Groups of TC12 (Artificial Intelligence).

SCOPES

An initial but not comprehensive list of topics of study includes

- theory, formal models, e.g. ontologies, and emerging new paradigms of organized and informal communities, of social and collaborative processes, and of semantics of data and knowledge;
- elicitation of ontologies and semantic content creation in general by social processes, expertise sharing and agreement; methodologies for same;
- auto-emergence of social semantics; harvesting and mining collective intelligence from community interactions; pragmatic web;
- engineering and prototyping of supporting knowledge-based systems for collective intelligence;
- collective intelligence in linked data; evolution and quality assurance of such linked data;
- the interaction of formal semantics with informal social semantics; social web interoperability issues;
- modeling of situational awareness; hybrid socio-technical systems;
- identity and authentication of entities and services on the (social) semantic web; related issues of trust, privacy and security;
- implementation and exploitation of social semantics as web services; self-organizing services tailored to communities; methodologies for adoption of such services;
- scalability issues for web-sized collective intelligence;
- interoperability of heterogeneous and autonomous knowledge sources from multiple disciplines through their respective communities.
WG12.8 – Intelligent Bioinformatics and Biomedical Systems
est. 2010

AIMS
To obtain a deeper understanding of the Bioinformatics, Biomedical Systems and its Applications and help in the development of its theoretical foundations and technological underpinning, as well as its global integration from molecular analysis to clinical diagnosis.

SCOPES
The scope of the Working Group's activities includes (but is not restricted to) the following:

- Study of the formal and practical knowledge representation issues of the Bioinformatics, Biomedical Systems and its Applications.
- Design, evaluation and use of ontologies for the various layers we would like to integrate, including genome, proteins, molecular pathways and clinical diagnosis.
- Evaluation and state of the art data mining tools for inferring new information from existing and new biological and biomedical databases.
- Studies of human centred aspects specifically for the Bioinformatics, Biomedical Systems and its Applications, including discovery of early cancer stages, such as through genomic predispositions and/or functional medical imaging.
- Information extraction, automatic and semi-automatic generation of meta data.
- Advanced string technology applications to Bioinformatics, Biomedical Systems and its Applications.

WG12.9 – Computational Intelligence
est. 2011

AIMS

- To obtain a deeper understanding of Computational Intelligence and its Applications and help in the development of its theoretical foundations and technological underpinnings.

1) Novel concepts of computational Intelligence approaches and their adaptation for handling real world applications.
2) Investigation of techniques of modification of computational Intelligence approaches so as to produce more effective computational Intelligence approaches.
3) Enhancement of the computational Intelligence approaches by co-operating with classical or statistical methods.
4) Using computational Intelligence approaches for handling constrained, multi-objective and large scale optimization problems for real world applications.
5) Application of computational Intelligence approaches in real industrial applications.
6) Parallel computational Intelligence approaches for practical applications in real world.
7) Using computational Intelligence approaches for solving dynamic optimization or time-varying problems in real world.
8) The following computational intelligence approaches include, but are not limited to:
   - Neural Networks
   - Fuzzy Systems
   - Evolutionary Computation
   - Particle swarm optimization
   - Multi-agent systems
- Intelligent control systems
- Support vector machine
- Bayesian networks
- Global and constrained optimization
TC 13 - Human-Computer Interaction - Aims and Scopes

est. 1989

AIMS

To encourage development towards a science and a technology of human-computer interaction, the Technical Committee will pursue the following Aims:

- to encourage empirical research (using valid and reliable methodology, with studies of the methods themselves where necessary);
- to promote the use of knowledge and methods from the human sciences in both design and evaluation of computer systems;
- to promote better understanding of the relation between formal design methods and system usability and acceptability;
- to develop guidelines, models and methods by which designers may be able to provide better human-oriented computer systems;
- to co-operate with other groups, inside and outside IFIP, so as to promote user-orientation and "humanization" in system design.

SCOPES

The main orientation is toward the users, especially the non-computer-professional users, and how to improve the human-computer relationship for them.

Areas of study include:

- the problems people have with computers;
- the impact of computers upon people in both individual and organizational contexts;
- the determinants of utility, usability and acceptability;
- the appropriate allocation of tasks between computers and people;
- modelling the user as an aid to better system design;
- harmonising the computer to the characteristics and needs of the user.

While the Scope is thus set wide, with a tendency towards general principles rather than particular systems, it is recognised that progress will only be achieved through both general studies to advance theoretical understanding and specific studies on practical issues (e.g. interface design standards, software system consistency; documentation, appropriateness of alternative communication media, human factors guidelines for dialogue design, the problems of integrating multi-media systems to match user needs and organizational practices etc.).

WG13.1 - Education in HCI and HCI Curricula

est. 1990, revised 1991

AIMS

- to improve HCI education at all levels of higher education;
- to coordinate and unite efforts to enhance the development of HCI curricula;
- to recommend fundamental structures for curricula and course materials and for their adaptation to the various national educational systems;
- to advance international recognition of qualifications in this field, and
- to promote the teaching of HCI.
SCOPES

The scope of the Working Group will build upon existing work in IFIP member countries to include:

- the evaluation of the needs of industry to enhance the qualifications of HCI, based upon societal objectives to improve the work environment;
- the collation of existing curricula, course literature and other relevant materials developed by member societies or institutions who are contributing to their work;
- the design of recommendations and guidelines for HCI curricula at different levels of higher education, and the adaptation of the guidelines to the cultural situation within which the respective education systems are based.

SIG13.1 - Interaction Design and International Development
est. 2008, migrated to WG 13.8 in 2014

WG13.2 - Methodology for User Centred System Design
est. 1992

AIMS

The principal objective of the Working Group will be:

- to foster research, dissemination of information and good practice in the methodical application of HCI to software engineering.

This objective decomposes into two sub-goals:

- to encourage research into and development of HCI principles, methods and techniques applied to system design and integrated with principles, methods and tools in software engineering, and
- to encourage research into human action within the system development process and to promote knowledge transfer from such studies into the construction of integrated HCI-SE design methods.

SCOPES

- evaluation and synthesis of HCI specification and design methods;
- implications of cognitive psychology for the design of human-computer interfaces;
- evaluation and study of different approaches to design delivery: cognitive models, design rationales, task artifact cycles, engineering principles, development methods;
- methods and techniques of human factors in software engineering as practised in industrial environments;
- human behaviour in software development, i.e. cognitive studies of software engineering;
- cooperative work techniques applied to software development.

SIG13.2 - Interaction Design and International Development
est. 2009, migrated to WG 13.9 in 2014
WG13.3 - Human-Computer Interaction and Disability

AIMS

The principal objectives of the Working Group will be:

- to make HCI designers aware of the needs of people with disabilities;
- to recommend guidelines for the design of HCI to facilitate the use of computers by people with disabilities;
- to monitor the latest developments in the design of HCI and their impact on accessibility and usability;
- to encourage the development of information systems and complementary tools which permit the adaptation of the human interface for each specific user.

SCOPES

There are over 500 million people with disabilities in the world. Social exclusion and many other problems often result from their situation. It is recognised that developments in IT/HCI can often help with problems, for example to maximise choice and integration. However, there is also a danger that such developments can lead to the further exclusion of this user group if they are not designed from the beginning with universal access as an aim.

Working Group 13.3 intends to make designers of information systems and complementary tools aware of the needs of this group in order to encourage the development of more appropriate tools for access and usability. As a result, systems will become universally accessible, and the market for them will increase.

Specifically the scope of WG13.3 will include the following activities:

- coordination and exchange of information with other relevant bodies;
- collaboration with institutions interested in this field of HCI and disability;
- focussed HCI orientation to enable people with disabilities to use information systems and complementary tools for positive advantage.

WG13.4 - (joint with WG2.7; see TC2)

WG13.5 – Resilience, Reliability, Safety and Human Error in System Development
est. 1998, revised 2014

AIMS

This working group aims to support practitioners, regulators and researchers to develop leading edge techniques in resilience engineering, hazard analysis and safety engineering of interactive computer-based systems. Particular emphasis will be on the role of human error both in the development and in the operation of complex processes and on techniques that can be easily integrated into existing system engineering practices. Specifically, the aims are:

- to provide a framework for studying human factors that relate to systems failure;
- to provide a forum for practitioners, regulators and researchers interested in the ‘human contribution’ to major accidents and incidents;
- to identify leading edge techniques for the development of safety-critical interactive systems and integrate them with existing systems engineering techniques;
- to support and guide international accreditation activities in the area of safety-critical systems.
- to address system design within its whole socio-technical and environmental context.
SCOPES

To build on existing work in IFIP member countries in the following areas:

- techniques for analysing human, managerial and organisational factors that relate to the occurrence of accidents;
- the integration of human factors concerns into risk analysis and assessment;
- the integration of human factors concerns into systems engineering techniques for interactive safety-critical systems development;
- the ergonomics of human-computer interaction with safety-critical applications;
- the role of human error both in the development and in the operation of complex processes.

WG13.6 - Human-Work Interaction Design
est. 2005

AIMS

The aims of the HWID working group are:

- To encourage empirical studies and conceptualizations of the interaction among humans, their variegated social contexts and the technology they use both within and across these contexts.
- Promote the use of knowledge, concepts, methods and techniques that enables user studies to procure a better apprehension of the complex interplay between individual, social and organisational contexts and thereby a better understanding of how and why people work in the ways they do.
- Promote a better understanding of the relationship between work-domain based empirical studies and iterative design of prototypes and new technologies.
- Establish a network of researchers, practitioners and domain/subject matter experts working within this field.

Thus on an overall level the working group aims at establishing relationships between extensive empirical work-domain studies and HCI design.

SCOPES

A Human-Work Interaction Design group (HWID) will provide the basis for an improved cross-disciplinary co-operation and mutual inspiration among researchers, but it will also lead to a number of new research initiatives and developments, as well as to an increased awareness of HWID in existing HCI educations. Complexity will be a key notion in the working group, it is not a priori defined or limited to any particular domains. A main target of the work group is the analysis of and the design for the variety of complex work and life contexts found in different business.

Technology is changing human life and work contexts in numerous, multi-faceted ways:

- Interfaces between collaborating individuals; advanced communication networks
- Small and large-scale distributed systems
- Multimedia and embedded technologies
- Mobile technologies and advanced "intelligent" robots
- With this evolution, toward new ways of working, has followed an intensive demand for techniques and technologies that address contemporary issues connected to:
  - Communication, collaboration, and problem solving
  - Large information spaces, variability, discretion, learning, and information seeking

This evolution toward new ways of working and living must be embraced as a challenge to current knowledge and practice and one, moreover, which presents exciting new opportunities in:

- Epistemology, with knowledge acquisition, knowledge creation, management and knowledge sharing
The symbiosis of users and contexts of use, between work and life-quality and with both professional and individual development.

It is a challenge to design applications that support users of technology in complex and emergent organisational and work contexts, and thus opportunities exist to focus on methods, theories, tools, techniques and prototype design on an experimental basis. Under these circumstances, the primary question is less whether we choose to study the use of a particular computer application or prefer, instead, to conduct bottom up empirical experiments of work contexts. The new problem is how we can understand, conceptualise and design for the complex and emergent contexts in which human life and work are now embroiled. This problem calls for cross disciplinary, empirical and theoretical approaches that focus on Human-Work Interaction Design, meaning that the technology itself and particularly the design and use of technologies mediates the interaction between humans and specific work contexts.

---

**WG13.7 – Human - Computer Interaction & Visualization (HCIV)**
est. 2008

**AIMS**

- To establish a study and research program that will combine both scientific work and practical applications in the fields of Human – Computer Interaction and Visualization.
- To promote the development of “effective” visualizations that benefit from the capabilities and functionalities of the human visual system, e.g. visual perception and other cognitive abilities.
- To promote the development of practical applications, e.g. in engineering, which benefit from the newly developed concepts and which provide the necessary fields for evaluation.
- To integrate several additional aspects of further research areas, such as Scientific Visualization, Data mining, Information Design, Computer Graphics, Cognition Sciences, Perception Theory, or Psychology, into this approach.

Thus the WG will provide a creative work environment for performing innovative research at the interface between Human – Computer Interaction and Visualization.

---

**WG13.8 – Interaction Design and Children**

**AIMS and SCOPE**

- To support and develop the research, practice and education capabilities of HCI in institutions and organisations based around the world taking into account their diverse local needs and cultural perspectives;
- To promote application of interaction design research, practice and education to address the needs, desires and aspirations of people across the developing world;
- To research and promote interaction design practice in cross-cultural settings, with a special focus on new and emerging economies;
- To develop links between the HCI community in general and other relevant communities involved in international development and cross-cultured aspects of ICT development.

---

**WG13.9 – Interaction Design and Children**
est. 2013

The focus of the work within Working Group 13.9 is on promoting high quality coordinated research in child computer interaction and in interaction design with children.
AIMS

This working group aims to support practitioners, regulators and researchers to develop the study of interaction design and children across international contexts. Specifically it will seek – as a working group – to develop a mature tested set of methods and practices that this academic and practitioner base can use. It will aim:

- To promote high quality research in child computer interaction and in interaction design with children
- To provide an accessible international forum and information site for researchers interested in HCI and Interaction Design where the users are children
- To coordinate and manage events for IDC researchers and practitioners including, but not limited to, the annual IDC conference and the IDC workshops.

SCOPES

To build on existing work in IFIP member countries in the following areas:

- The development and refinement of methods for engaging with children in the design of interactive technologies
- The development and refinement of methods for engaging with children in the evaluation of interactive technologies
- The role of children as participants in Interaction Design
- Designing for children from all cultures, with all abilities, talents and economics.

WG13.10 – Human-Centered Technology for Sustainability

est. 2015

AIMS

This working group aims:

- to promote research, design, development, evaluation of human-centred technology to encourage sustainable use of resources in various domains. These technologies would include interaction techniques, interfaces and visualizations for applications, tools, games, services and devices.
- to bring together and stimulate exchanges between, researchers, practitioners, and policy-makers from across different disciplines involved in sustainability through regular events. These disciplines would include computer science, engineering, design, social sciences, etc.
- to coordinate publication and dissemination of related research output, information, policies, etc.
AIMS

To encourage computer applications for entertainment and to enhance computer utilization in the home, the technical committee will pursue the following aims:

- to enhance algorithmic research on board and card games
- to promote a new type of entertainment using information technologies
- to encourage hardware technology research and development to facilitate implementing entertainment systems, and
- to encourage non-traditional human interface technologies for entertainment.

SCOPES

(1) Algorithm and strategy for board and card games
   -- algorithms of board and card games
   -- strategy control for board and card games
   -- level setup for game and card games

(2) Novel entertainment using ICT
   -- network-based entertainment
   -- mobile entertainment
   -- location-based entertainment
   -- mixed reality entertainment

(3) Audio
   -- music informatics for entertainment
   -- 3D audio for entertainment
   -- sound effects for entertainment

(4) Entertainment human interface technologies
   -- haptic and non-traditional human interface technologies
   -- mixed reality human interface technologies for entertainment

(5) Entertainment robots
   -- ICT-based toys
   -- pet robots
   -- emotion model and rendering technologies for robots

(6) Entertainment systems
   -- design of entertainment systems
   -- entertainment design toolkits
   -- authoring systems

(7) Theoretical aspects of entertainment
   -- sociology, psychology and physiology for entertainment
   -- legal aspects of entertainment

(8) Video game and animation technologies
   -- video game hardware and software technologies
   -- video game design toolkits
   -- motion capture and motion design
   -- interactive story telling
   -- digital actors and emotion model
(9) Interactive TV and movies
-- multiple view synthesis
-- free viewpoint TV
-- authoring technologies

(10) Edutainment
-- entertainment technologies for children's education
-- open environment entertainment robots for education

WG14.1 – Digital Storytelling

SCOPES

Storytelling is one of the core technology of entertainment. Especially with the advancement of information and communication technologies (ICT), new type of entertainment called video games have been developed where interactive story development is the key that makes those games really entertaining. At the same time, however, it has not been studied well what is the difference between the interactive storytelling and the conventional storytelling. Also as the development of interactive storytelling need a lot of time and human power, it is crucial to develop technologies for automatic or semiautomatic story development. The objective of this working group is to study and discuss these issues.

WG14.2 – Entertainment Robot
est. 2004, rev. 2006

SCOPES

Robot is becoming one of the most appealing entertainment. New entertainment robot and/or pet robot is becoming popular. Also, from theoretical point of view, compared with computer graphics based characters/animations, robot is an interesting research object as it has physical entity. Taking these into considerations, it was decided at the SG16 annual meeting that a new working group on entertainment robot is to be established.

WG14.3 – Theoretical Basis of Entertainment
est. 2003, rev. 2006

AIMS

- For the benefit of society, to promote visibility and to increase the impact of research and development in the entertainment computing area, especially in the fields defined in the scope of this working group.
- To promote quality and relevance of academic and industrial research and development in the entertainment computing area.
- To promote ethical behavior and appropriate recommendations or guidelines for research related activities, for example, submission and selection of publications, organization of conferences, allocation of grants and awards, and evaluation of professional merits and curricula.
- To promote cooperation between researchers and with other established bodies and organizations pursuing the above aims.
- To contribute to assessing the scientific merits and practical relevance of proposed approaches for entertainment technology and applications.
SCOPES

Although there are huge entertainment industries already such as video games, toys, movies, etc., little academic interest has been paid on such questions as what is the core of entertainment, what is the technologies of entertainment can be applied to other areas such as education, learning and so on. The main objective of this WG is to study these issues.

WG14.4 – Entertainment Games

AIMS

To research and develop computing techniques for the improvement of computer games and other forms of computer entertainment.

SCOPES

The scope of this workgroup includes, but is not limited to the following applications, technologies and activities.

Applications:

- Analytical games (e.g., Chess, Go, Poker)
- Commercial games (e.g., Action games, Role-playing games, Strategy games)
- Mobile games (e.g., Mobile phones, PDA's)
- Interactive multimedia (e.g., Virtual reality, Simulations)

Technologies:

- Search Techniques
- Machine Learning
- Reasoning
- Agent Technology
- Human-Computer Interaction

WG14.5 - Social and Ethical Issues in Entertainment Computing
est. 2005, rev. 2006

AIMS

1. Foster the ethical design, development, implementation, applications and use of entertainment computing.
2. Encourage surveys and studies on social, ethical and cultural aspects of entertainment computing.
3. Develop methodologies for studying social, ethical and cultural implications of entertainment computing.
4. Establish a global platform for interaction, exchange, joint initiatives and co-operation between such groups as:

- the end users of entertainment computing
- industrial developers and designers of entertainment computing
- policy, decision making, social and consultative bodies
- academics and scientists.
SCOPES

The social and ethical implications of entertainment computing including:

- actual and potential human usefulness or harm of entertainment computing
- social impact of these technologies
- developments of the underlying infrastructure
- rationale in innovation and design processes
- dynamics of technology development
- ethical development
- cultural diversity and other cultural issues
- education of the public about the social and ethical implications of entertainment computing, and of computer professionals about the effects of their work.

WG 14.5 explicitly cares about the position of, and the potentials for, vulnerable groups such as children, the less-educated, disabled, elderly and non-employed people, cultural minorities, unaware users and others.

---

WG14.6 – Interactive TeleVision (ITV)  
est. 2007

AIMS

- To promote visibility and to increase the impact of research and development in the ITV field
- To bring together interdisciplinary approaches to ITV research and development issues (e.g. content production, computer science, media studies)
- To encourage cooperation between researchers and other established bodies and organizations, through the development of joint project proposals
- To facilitate the development of suitable academic and practical teaching programs

SCOPES

- Alternative content distribution (mobile TV, peer-to-peer TV, IPTV)
- Interactive storytelling, user contributed content
- Interactive and personalized advertising systems
- Applications for t-commerce, t-learning, t-health, entertainment
- Ethical, regulatory and policy issues
- Interoperability of middleware, standards, multimedia metadata
- Authoring, production and virtual reality systems
- Content management, digital rights management
- Multimedia, graphics, broadcast and video technology
- Content enriched communication services, video conferencing
- Personalization, user modeling, intelligent user interfaces
- Usability, accessibility, universal access, multimodal interaction

---

WG14.7 – Art and Entertainment  
est. 2007

AIMS

- To explore the way art and cinema aesthetics can play a role in different areas of computer science.
- One of its goals is to modify computer science by the application of the wide range of definitions and categories normally associated by making art and cinema.
• To go beyond the usual definition of art and cinema aesthetics in computing, which most often refers to the formal, abstract qualities of such structures – a beautiful proof, or an elegant diagram.
• To research the broader spectrum of aesthetics – from abstract qualities of symmetry and form to ideas of creative expression and pleasure – in the context of computer science.
• To prove the assumption behind art and cinema aesthetic computing that the field of computing will be enriched if it embraces all of aesthetics.

SCOPES

The influence of technology and scientific innovation is profoundly changing how we express ourselves. Arts and Entertainment is a new field that represents the exciting convergence of technology with the established design discipline. The Media Arts and Cinema offers a comprehensive approach to design that encourages innovation by media artists, scientists and engineers. The working group will pursue the following activities:

WG14.8 – Serious Games
est. 2012

AIMS

To promote serious games research, development and assessment, and to encourage and facilitate wider adoption and use of serious games, the working group will pursue the following activities:

• to establish a shared understanding and arena for current and emerging serious games
• to connect interdisciplinary approaches/groups and encourage cooperation and collaboration in research and development projects
• to encourage investigation of entertainment in its various forms in serious games (e.g. stimulating, thought provoking, pleasurable, etc.)
• develop methodologies to inform design, development and assessment of serious games
• facilitate the development of suitable academic and practical teaching programs

SCOPES

• video games, simulations, virtual environments, interactive art/media, mixed reality/media for purpose
• interactive narrative and storytelling (e.g. to participate in scenarios and social situations and make ethical, moral and strategic judgments and decisions)
• virtual heritage (e.g. to experience cultures, customs and values of past and present civilizations)
• mobile platforms for serious games
• digital development tools, authoring environments and game engines
• development of methodologies & guidelines for design, development and assessment
• incorporation of learning/pedagogical theories
• social, cultural and ethical impact/considerations of these technologies

WG14.9 – Game Accessibility
est. 2015

AIMS

To promote software and hardware research on game accessibility
To provide, encourage and facilitate the use of methods and tools for inclusion in the game industry
To establish a shared understanding of current and emerging requirements for users with special needs in the
field of video games
To connect interdisciplinary approaches/groups and encourage cooperation and collaboration in research and development projects
To develop methodologies and guidelines for game designers and game developers for accessible games
To build a common knowledge base, making it available for practitioners and for academics/lecturers, for teaching purposes.

SCOPES

Games, video games and entertainment objects, in their broadest sense
Simulations and virtual/augmented or mixed reality
Transmedia and crossmedia
Mobile phones, tablets and emerging platforms and devices
Development tools, game engines
Social, cultural and ethical impact and considerations
## IFIP STANDING COMMITTEES (Dec-29-2016)

### TECHNICAL ASSEMBLY (TA)
- **Chair**: Michael GOEDICKE
- **Ex-officio**:
  - Executive Committee: Eduard Dundler
  - General Secretary: Eduard Dundler

### FINANCE COMMITTEE (FC)
- **Chair**: Franz RAMMIG
- **Ex-officio**:
  - General Secretary: Eduard Dundler
  - Observer: Declan Brady

### PUBLICATIONS COMMITTEE (PC)
- **Chair**: Kai RANNENBERG
- **Ex-officio**:
  - General Secretary: Eduard Dundler

### ACTIVITY MANAGEMENT BOARD (AMB)
- **Chair**: Eduard DUNDLER
- **Ex-officio**:
  - General Secretary: Eduard Dundler
  - Observer: Declan Brady

### DIGITAL EQUITY COMMITTEE (DEC)
- **Chair**: Gabriela MARIN-RAVENTOS
- **Ex-officio**:
  - Technical Assembly
  - General Secretary: Eduard Dundler

### INTERNATIONAL LIAISON COMMITTEE (ILC)
- **Chair**: Leon STROUS
- **Ex-officio**:
  - Technical Assembly
  - General Secretary: Eduard Dundler

### STATUTES AND BYLAWS COMMITTEE (S&BC)
- **Chair**: Max BRAMER
- **Ex-officio**:
  - Technical Assembly
  - General Secretary: Eduard Dundler

### ADMISSION COMMITTEE (AC)
- **Chair**: Max BRAMER
- **Ex-officio**:
  - General Secretary: Eduard Dundler

### SERVICE AWARDS COMMITTEE (SAC)
- **Chair**: Jerzy NAWROCKI
- **Ex-officio**:
  - Technical Assembly
  - General Secretary: Eduard Dundler

### CONGRESS STEERING COMMITTEE (CSC)
- **Chair**: Leon Strous

### NOMINATIONS COMMITTEE OFFICERS (NC)
- **Chair**: Dong Yoon Kim
- **Ex-officio**:
  - Technical Assembly
  - General Secretary: Eduard Dundler

### TASK FORCES AND APPOINTMENTS

#### IFIP WEBSITE TASK FORCE
- **Chair**: Max BRAMER
- **Ex-officio**:
  - General Secretary: Eduard Dundler

#### IFIP HISTORIAN
- **Chair**: Roger JOHNSON

#### GENERAL SECRETARY
- **Ex-officio**:
  - Technical Assembly
  - General Secretary: Eduard Dundler

#### IFIP PUBLICATIONS OFFICER
- **Ex-officio**:
  - Technical Assembly
  - General Secretary: Eduard Dundler
Name Index

A

AAEN · 57, 63
AAGESEN · 45
AAKHUS · 57
AAMODT · 87, 88, 89
AANESTAD · 57
AARTS · 57
ABADI · 22, 85
ABASCAL · 92, 93, 94
ABBOTT · 57
ABDELKADER · 59
ABDELNOUR-NOCERA · 95, 97
ABDELRAHEEM · 79
ABEBAWI · 69
ABERER · 28
ABEWICKRAMA · 8, 15
ABIDOGUN · 89
ABOU EL KALAM · 83
ABOU-ZEID · 56
ABRAHAM · 76
ABRAHAMS · 59
ABRAMOV · 96
ABUREESH · 35
ABU-SCHANAB · 62
ACCORSI · 64, 79
ACETO · 23
ACEVEDO · 69
ACHARYA · 48
ACHEMLAL · 85
ACTON · 59
ADAM · 72
ADAM A. · 57
ADAM F. · 59
ADAMATZKY · 21
ADAMS · 57, 83
ADAMS · 63
ADAMS C. · 57
ADESTA · 40
ADHIKARI · 69
ADLKHA · 43
ADORNI · 87
AFSARMANESH · 37, 39
AGAH · 60
AGERFALK · 57
ÄGERFALK · 57
AGNEW · 76
AGUILINE · 48
AGRAWAL · 65, 88
AGRAWALA · 52
AGROSIT · 11
AGUARON · 59
AGYEI · 35
AHMED · 29
AHN · 80
AIDA · 45
AIDEMARK · 60
AIER · 64
AIGNER · 79
AIHARA · 51
AIKEN · 4, 35
AIXALA · 59
AJMONE MARSAN · 52
AKINDEMOWO · 71
AKRAM · 60, 79
AKYILDIZ · 47, 52
AL AGHA · 48
AL AWADHI · 69
AL BOUNA · 80
ALANI · 90
IAIWHADI · 62
ALAWNEH · 80
ALAYYAR · 35
ALBANI · 56
ALBERTS · 50
ALBERTS · 71
ALBION · 35
ALCARAZ TELLO · 83
ALCOCK · 61
ALDINI · 85
ALEKSY · 61
ALFARO · 23
ALFENS · 40
ALI · 56
ALIX · 40
ALLEN · 57, 63
ALLEN D. · 57
ALLEN. · 66
ALLENDER · 20
ALLEYNE · 57
ALLISOND · 72
ALM · 94
ALMAWASHI · 62
ALMEIDA · 41, 52, 74
ALMEROOTH · 48
AL-QAIMARI · 92
AL-RESHAIAD · 59
AL-SHEAR · 48
AL-SHUAILI · 62
ALTENDORF-KAISER · 40
ALTER · 57
ALTMAN · 47, 52
ALVAREZ · 57
AL-ZAHIR · 60
AMADIO · 23
AMALDI · 96
AMAMIYA · 75
AMANDI · 87
AMBOSITTI · 71
AMERI · 40
AMIR · 24
AMIR Y. · 75
AMMARI · 53
AMMETER · 57
AMMARI · 53
AMMITER · 57
AMORIM · 50
AN · 89
ANANTHARAMAN · 22
ANDERSEN · 36, 40, 61
ANDERSON · 71, 76
ANDERSON B. · 65
ANDERSSON · 57
ANDERSSON H. · 71
ANDJELKOVIC · 72
ANDO · 4
ANDRE · 98
ANDREEV · 59
ANDRESEN · 34, 35
ANDREWS · 52, 93
ANEROUSIS · 48
ANG · 43, 54
ANGELEI · 35
ANGELINI · 39
ANNABI · 58
ANNEBICQUE · 59
ANSLOW · 96
ANTIE · 98
ANTON · 29
ANTONELLI · 39
ANTTIROIKI · 62
ANTUNES C H · 60
ANTUNES P · 60
ANWAR · 83
AOE · 72
AOTO · 22
AOUSSAT · 38
APOSTOLICO · 24
APPERLEY · 92, 96
ARACIL · 49
ARAI · 40
ARARATO · 52
ARAUJO · 62
ARCHAMBAULT · 103
ARDAGA · 80
ARDIS · 63
ARDITO · 94
ARGENT · 42
ARGY · 71
ARIAV · 57
ARKIN · 55
ARLAT · 74, 76
ARMANDO · 80, 82
ARMISTEAD · 73
ARMSTRONG · 79, 85
ARMSTRONG C · 82
ARMSTRONG H · 82
ARNAUD · 59
ARNFALK · 72
ARNOTT · 59
AROYO · 89
ARRIGO · 43
ARTIBA · 54
ARUNABHA · 79
ARVIND · 29
ASA · 67
ASCOTT · 102
ASHENDEN · 85
ASHITAN · 83
ASKOXYLAKIS · 79
ASPRAY · 72
ASSAF · 83
ASSMANN · 27
ASSOGNA · 41
ASTELL · 103
ASTESIANO · 21
ASTUDILLO · 25
ATHANASIASIDIS · 42
ATIENZA · 76
ATIQUIZZAMAN · 48
ATKINSON · 57
ATLEE · 29
ATLURI · 80
ATMACA · 47
AUERBACH · 4
AUGUSTI · 54
AUGUSTSSON · 29
AUJOL · 53
AURIGEMMA · 65
AUSIELLO · 19
AYALOS · 52
AVASILCAI · 61
AVEDI · 62
AVERHAUS · 22
AVGEROU · 69, 70
AVISON · 56, 57, 61
AVIZIENIS · 76
AVOINE · 79
AVOURIS · 92
AVRAM · 43, 71
AVRESKY · 74
AWAN · 73
AWE · 56, 57, 61, 62, 63, 66
AXELROD · 94
AXELSSON · 62
AYALA · 76
AYDIN · 59
AYESTAL · 52
AYESTARAN · 59
AYKANAT · 75
AYNSLEY · 17
AZEVEDO · 39, 94
AZIZ · 80

B

BAADER · 22
BAALSRUD HAUDE · 103
BACCELLI · 52
BACIC · 69
BACK · 26, 88
BACKHOUSE · 25
BADAV · 69
BADLER · 42
BAETEN · 19, 23
BAETS · 59
BAEZA-YATES · 69
BAGCHI · 51
BAGHERZADEH · 75
BAGNARA · 93
BAGNASCO · 48
BAHLI · 59
BAI · 80