

News

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International Federation for Information Processing

December 2020 http://www.ifip.org

IITPSA Achieves IP3 Accreditation for a Second Term

IP3 is pleased to announce that IITPSA (Institute of information Technology Professionals South Africa) has completed the process of renewing the accreditation of its professional recognition schemes with flying colours. The IP3 Board approved the recommendation of the Standards and Accreditation Council earlier in December to extend the accreditation for a further 5 years unconditionally.



The evaluation process was notable for several reasons. It was the first to be completed remotely, with the assessors remaining at their home bases in

different continents. It was the first to be completed without the need for interviews, thanks to the high quality of the comprehensive documentation submitted by IITPSA in support of their application. It was the first to accredit a SFIA Level 7 designation, recognising the role of Professional CIO (Pr.CIO).

This latter "first" is significant, for it recognises the crucial role played by CIOs in setting and implementing strategy for enterprises, addressing the needs of the business, the appropriate technology, and the provision of skilled resources to support the marriage of technology into the business. The certification scheme also encompasses the importance of governance, compliance, and ethical behaviour in the CIO's portfolio. Achieving the Pr.CIO designation requires an appropriate mix of academic qualifications, relevant experience, assessment of competence and satisfying a peer review interview.

Tony Parry, IITPSA's CEO, stresses that this certified designation is specifically aimed at senior practitioners in the CIO (or equivalent) role and was motivated at the request of the CIO Council. He emphasises that the Professional Member (PMIITPSA) designation remains appropriate for all other senior practitioners at SFIA Level 5 and above.

News from IP3 Chair (Moira de Roche)

I was invited to speak at the IT Professionals Europe (ITPE) Professional Ethics Expert Group meeting on 9 December 2020, about the IFIP Code of Ethics. The title of my presentation was "Ethics, ethics everywhere, but which code should we use?". I took the opportunity to explain to participants that the overabundance of Codes of Ethics does nobody any good. I went on to explain the process used by the IFIP Task & Finish Group to compile the IFIP Code of Ethics. I stressed that any organisation should use this code as the starting point for their own Codes, adding to it as required to suit local conditions. Members of ITPE can find all the presentations from the meeting in the members' section of the ITPE website. Click here for the IFIP presentation.

I was also invited to participate in a working group discussion in the World of Work Dialogue, convened by WHO. Across the four themes there were over 40 participants representing SMEs, large multinationals, labour unions, MOH, ILO, WHO, etc. The themes for discussion were:

- Collaborating for results: Public-private collaboration in health emergencies
- Communicating in crisis: Information sharing and leadership during health emergencies
- Changing the future today: Sustainability at the core of business, contributing to a healthy society, economy, and world
- Custodians of health: Employers as health protectors/providers/enablers

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I participated in the topic shown in bold. I emphasised the importance of Trust and Ethics in a world that had gone online virtually overnight. For more information visit the <u>Events</u> page at the World Health Organisation's website.

IFIP Code of Ethics

The Task & Finish Group, led by David Kreps (TC9), has produced a final version of the code. It will be published in booklet form. As it is the work of IP3 to promote and market the code, there will be a section of the IP3 website which will include a page for a downloadable PDF of the code, as well as education resources aimed at Member Societies, Educational Institutions, and organisations (Business and Government).

Liesbeth Ruoff, who represents KNVI on the IP3 board, shared this good news: "After the Code of Ethics was accepted at IFIP GA, KNVI immediately took the opportunity to present the Code and it was accepted at their AGM in November. KNVI has not changed anything in the code and will use 2021 to get the Code introduced to their members".

Since the Code of Conduct at IITPSA is due for a review, the Social & Ethics committee will use the IFIP Code of Ethics as the basis for a new code and add anything required to suit local conditions (although it is unlikely there will be much to change).

Has your organisation adopted the IFIP Code of Ethics or started work on adapting the code? Please let us know if you have.

Digital Skills for Everyone, everywhere (project led by Liesbeth Ruoff)

IP3 remain committed to this project. Under the leadership of Computer Society Botswana, and in collaboration with Rotary, a pilot is underway in Botswana. Plans were affected by the COVID-19 Pandemic, but at least some activities have continued.

IP3 will be working hard during 2021 to develop further partnerships. We really want to collaborate with TCs on this project and will be reaching out early in 2021 in this regard. I am reminded of the slogan "You can go faster on your own, but together you can go further"

IITPSA President takes the reins at AfICTA

The President and Board Chairperson of the Institute of Information Technology Professionals South Africa (IITPSA), Thabo Mashegoane, has been elected as Chairman of the Africa ICT Alliance (AfICTA).

Formerly the Vice-Chairman of AfICTA, he succeeds Engr. Hossam Elgamal from Egypt to become the third Chairman. AfICTA, a private sector-led alliance of ICT Associations, multinational corporations, companies, organisations and individuals in the ICT sector in Africa, aims to fulfil the promise of



the digital age for everyone in Africa by encouraging dialogue and fostering ICT enabled development.

During an electronic election at the AfICTA Annual General Meeting on 25 November, Mashegoane was elected chair, while IITPSA Past President and Non-Executive Director Ulandi Exner was also elected AfICTA Vice-Chair for Southern Africa.

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The election named the following board members and officers: Paul Rowney, Deputy Chair; Opeyemi Onifade, Treasurer; Dr. Waudo Siganga, Vice-Chair for East Africa; Engr. Assem Wahby, Vice-Chair, North Africa; Adetola Sogbesan, Vice-Chair, West Africa; and Eric Sindeu, Vice-Chair, Central Africa.

Thanking his predecessors for their service and leadership in the Alliance to date, Mashegoane noted that AfICTA was an organisation with a vast network, impact on critical policies, and reputation that took years and hard work to build. "Mine is to take the baton and continue where the honourable Engr. Hossam Elgamal has taken this organisation to. Of importance is the platform to enable African countries to collaborate and share best practices and lessons learnt with an objective of not leaving anyone behind in development. This is a vision we will continue to uphold. We stand in a critical position to influence attainment of Sustainable Development Goals 2030 through ICT."

Speaking after the election, Mashegoane said digital inclusion and ICT-enabled development was also a key mission for the IITPSA in South Africa. "The IITPSA shares the vision and ethos of AfICTA. IITPSA has also stated that we need to step up efforts to achieve the goals of the 2030 Agenda for Sustainable Development, which, among other things, seeks to bridge the digital divide and harness technology to address major global challenges such as poverty, climate change and conflict, we need to work harder. At IITPSA, we believe this means we have to collaborate across industries, across countries, to deploy the benefits of ICTs for the good of all," he said.

Software testers 'need to own their power'

Software testers, once seen as being below developers in the software hierarchy, are crucial in every stage of the software development lifecycle, and need to be more assertive throughout the development process. This emerged during an Institute of Information Technology Professionals South Africa (IITPSA) special interest group in software testing (SIGiST) webinar entitled *Why are we testing*?



Akshaye Fotedar, Test Lead and Agile QA Coach, said that in the Waterfall development era, testers had come in at the end of the process. This, said webinar participants, could have resulted in their being less valued than developers and meant that they often came into the process too late to course correct.

However, with Agile now mainstream, testers are crucial throughout the software development process, and should be more assertive, said Akshaye. "We are like software detectives – looking for bugs, and for anything that doesn't feel right so that we can ensure that the team is able to deliver quality products that add value and quality to someone else's life. Good testers need passion, drive and the attitude of an explorer. We aren't there to break the software."

In order to champion quality as a tester in an Agile team, he said testers needed to strengthen their verbal and written communication skills. "One skill we need to acquire as custodians of quality is to be able to coach the team on quality; to be both a coach and a leader within the team. In an Agile environment, we should be able to drive change rapidly, at any point in time." However, testers had to change the narrative they sold to themselves and everyone else, he said, and start speaking up more.

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IFIP Service Award for Prof./Dr. Frada Burstein

IFIP WG8.3 Decision Support is delighted to announce that Prof./Dr. Frada Burstein has recently been awarded an IFIP Service Award for her outstanding contributions to the group.

She served as secretary and then vice-chair of WG8.3 from 2004-2020 and organized a number of conferences and related publications. She is a Professor at Faculty of Information Technology, Monash University, Melbourne, Australia. At Monash University, Prof. Burstein initiated and led Knowledge Management Research Program, which comprised a virtual, industry sponsored Knowledge Management Laboratory.



She was awarded over \$10mln Australian dollars funding for research projects and scholarships from the Australian Research Council and industry, including two projects in emergency management decision support, and most recent on supporting medical reasoning. Her current research interests include business intelligence, mobile and real-time decision support, and health informatics. Her most substantial work is a set of two volumes of Handbook of Decision Support Systems, published by Springer.

She is a Fellow of the Australian Computer Society and Distinguished Member of the Association for Information Systems.



Innovation Arabia 14: Call for Abstracts



Under the patronage of His Highness Sheikh Hamdan Bin Mohammed Bin Rashid Al Maktoum, Crown Prince of Dubai and President of Hamdan Bin Mohammed Smart University (HBMSU), Innovation Arabia 14 will be held virtually on 22 – 24 February 2021 to address contemporary issues and explore the potential of the Arab countries to accelerate the pace of socio-economic growth and development and spread a culture of innovation throughout the world. Innovation Arabia 14 is a respectable scientific event where leading research scholars, university students, and industry professionals from around the world will have the opportunity to meet, network and share their experience and research results in the fields of quality and business management, health and environmental, learning. The event is especially significant during the crisis triggered by the COVID-19 epidemic which has generated strong tensions in business continuity and medico-social fields. This virtual event will feature a series of scientific presentations, webinars, round tables, workshops, exchanges, social activities and exhibition.

Innovation Arabia 14 will consist of the following five subthemes:

Smart Future Enablers
Virtual Experience Economy
Crisis Management and Business Continuity
Learning for Better Life
Social Innovation Systems

We welcome scholars, students, young entrepreneurs and practitioners from all disciplinary backgrounds to submit abstracts of applied research, case studies, showcases and e-posters for presentation at the conference sessions: https://innovationarabia.ae/abstract-submission/

Please refer to the guidelines of abstract submission for more details.

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Education and Information Technologies continued success and growing contributions for the IFIP TC3 journal

Education and Information Technologies (EAIT) is the official journal of the IFIP Technical Committee on Education (TC3) and is published by Springer. The journal covers the complex relationships between information and communication technologies and education at all education levels. Its breadth of coverage allows EAIT to examine fundamental issues, discuss specific instances and cases, draw inference and probe theory. This journal is embedded in the research and practice of professionals.

EAIT was first published in 1996 and has grown considerably over the years. While early volumes had four issues per year with a total of about five to ten papers each, in 2020 the journal has had six issues with a total of 288 published papers (and this number was out of around 1,100 submitted articles, making an acceptance rate of about 26%). Springer publishes all accepted articles as *Online First Articles* before they are assigned to an issue. In November 2020, there were 143 articles in *Online First* awaiting publication. EAIT is a hybrid, open access journal and authors can opt to make their research open access if they wish.

As you would expect in a high-quality international journal, EAIT aims to maintain and expand its international standing by careful selection of the papers submitted. It does this by peer review from a panel of experienced reviewers, thus providing a credible ongoing forum for debate and scholarly discourse. Special Issues are occasionally published to cover particular issues in depth. EAIT invites readers to submit papers that draw inferences, probe theory and create new knowledge that informs practice, policy and scholarship. Readers are also invited to comment and reflect upon the argument and opinions published.

EAIT is a truly international journal, with articles received from 76 countries in 2020. It is a platform for the range of debates and issues in the field of computing education as well as the many uses of information and communication technology (ICT) across many educational subjects and sectors. It probes the use of computing to improve education and learning in a variety of settings, platforms, and environments.

The EAIT Editor-in-Chief is supported by three highly professional Associate Editors and an active international Editorial Board of 28 experienced educators from 14 countries around the world. EAIT has recently been accepted into the Social Science Citation Index (SSCI) in the category 'Education & Educational Research'. It is also abstracted and indexed in SCOPUS, ACM Digital Library, ERIC, EBSCO, Google Scholar, ProQuest and many others.

Day of Computer Experts of Serbia

BELGRADE, 18th of November 2020 – An online meeting "The Day of Computer Experts of Serbia" was held in Belgrade on November 18, 2020, in the memory of November 18, 1960 when CER 10, the first domestic digital computer produced at the Mihajlo Pupin Institute, was promoted.

At that time, our country was one of the six countries in the world where there was a need to produce a digital computer, alongside state interest and relevant knowledge for that. The design and production of the digital computer was a top scientific and technological endeavour at that moment.

The introductory speeches were followed by the film "60 Years of CER 10 - the First Domestic Digital Computer". The film highlighted that this great jubilee should be used for even further business digitalisation, a more proactive role of the state in the development of digital Serbia, constant improvement of IT education and double-digit development of the IT market in Serbia.

The winners of the Informatics Association of Serbia (IAS) Plaque for the best IT results during the year 2020 were announced at the meeting.

The monograph "60 Years of the First Domestic Digital Computer in Serbia –Digitalisation Underways" was published on the occasion of this jubilee.

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UJ Academy for Computer Science and Software Engineering turns 50

Much of the technology we take for granted today stems from 50 years ago.

This academic year, the Academy for Computer Science and Software Engineering (ACSSE) in the <u>Faculty of Science</u> at the University of Johannesburg (UJ), is celebrating its 50th birthday. Cofounded in 1970 by Professor Sebastiaan "Basie" von Solms, it was one of the first independent computer science programs in the nation.

"During these 50 years, the ACSSE has grown into an established knowledge Centre for all aspects of Information Technology, and has kept track with the developments in the IT field, said Prof von Solms, UJ Director of the Centre for Cyber Security. "The ACSSE has already in the 1980s realised the importance of Information Security, and had played a significant role to develop knowledge capacity specifically in this area, and is still today seen as one of the leading departments in SA as far as Information and Cyber Security is concerned."

Prof von Solms says the department has made significant progress in population, infrastructure and access to technology in the last half-century. Presently the academy has 4 sub departments – Computer Science, Informatics, Information Security and the Centre for Cyber Security.

"Our degree courses have been structured on international standards and benchmarks. Therefore, in 2003, the 4-year BSc (Honours) degree of the ACCSE was accredited by the BCS, The Chartered Institute for IT, in the UK. At that stage the ACCSE was the first University in Africa achieving such accreditation, and even today is one of only two such Universities in Africa. Other Universities enjoying such accreditation include the Universities of Oxford and Cambridge," says Prof von Solms.

The Centre for Cyber Security has, since its establishment a few years ago, offered a number of Short Learning Programs (SLPs) in cyber-related fields. There are SLPs in Introduction to Cyber Security, Introduction to Digital Forensics and Introduction to Cyber Security Awareness.



"We are proud to have played a significant role over the past 50 years to provide SA with the required skills and knowledge in the field of IT, and will keep doing this in years to come," concludes Prof von Solms.

On degree level, the full time 4-year accredited program for the BSc (IT Honours) degree is the flagship program, but the ACSSE also caters widely for people working full time in industry and Government, and cannot attend full time classes. The Higher Certificate program in Information Technology is a 2-year part time official program giving students from industry and Government a sound knowledge in IT. This program has been successfully running for several years.

The ACCSE also has a strong international research record, and is concentrating on research in areas related to the 4th Industrial Revolution. Post graduate supervision and research in the areas of Cyber Security, Cyber Counterintelligence, Artificial Intelligence, Intelligent Software Agents, Web services, Biometric applications and more are actively pursued.

Prof Basie von Solms respectively marks 50 years as a staff member of the ACCSE. He was appointed on 1 October 1970, the same year as the Academy was established, and had been permanently involved since then – first at the Rand Afrikaans University, and later at the University of Johannesburg. The first Head of the Academy was prof Andries van der Walt who was a Professor in Mathematics. Van der Walt and von Solms were the first two staff members. Prof von Solms was Head of Computer Science for 27 years.

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Two South Africans awarded IFIP Fellowship status

South African Professors Judith Bishop and Paula Kotzé have been bestowed the prestigious International Federation for Information Processing (IFIP) Fellow Award at the recent IFIP General Assembly. IFIP is an international body in the field of IT, and the Institute for Information Technology Professionals South Africa (IITPSA) is the South Africa country member of IFIP.

The title of IFIP Fellow is the most prestigious IFIP technical distinction, which is conferred in recognition of outstanding and enduring contributions to the ICT industry, in the role of a technical leader, scientist, engineer or educator.

IITPSA CEO Tony Parry noted that the award was a relatively new honour, conferred on very few people around the world. "We are therefore very proud to see IFIP Fellow Awards conferred on these leading ICT professionals and academics from South Africa," he said.

"Congratulations to these two worthy recipients. We are indeed proud of you," said Prof Rossouw von Solms, former national representative to IFIP and Emeritus Professor at the Centre for Research in Information and Cyber Security at the Nelson Mandela University School of ICT.

Prof. Judith Bishop is a computer scientist and author whose career spans industry and academia. At Microsoft Research, she coordinated cross group projects, empowering teams to produce high quality products. As a professor, she was recognized as an innovator, who increased the adoption of new programming languages globally from Pascal to Ada to Java via her 17 books. After studying in South Africa, Judith received her PhD from the University of Southampton, UK. She worked at Wits, UP and Southampton and is now an Extraordinary Professor at Stellenbosch University. Judith is a Fellow of IITPSA, an ACM Distinguished Member, and has received the IFIP Silver Core Award.

Prof Paula Kotzé is an internationally acclaimed researcher and educator with significant achievements in the fields of human-computer interaction, human factors engineering and enterprise systems engineering. She holds a PhD in Computer Science with specialisation in Human-Computer Interaction from the University of York (UK), which she obtained in 1997.

After an academic career spanning 30 years, including in several senior management positions, she spent the last 10 years before her retirement in 2018 at the Council for Scientific and Industrial Research (CSIR) in South Africa, where she was Chief Researcher at the Meraka Institute. She is currently Extraordinary Professor in the Department of Informatics at the University of Pretoria.

Note on IFIP WG 8.6 Conference 2020

Indian Institute of Management (IIM), Tiruchirappalli in association with the International Federation for Information Processing (IFIP) WG 8.6 (HQ: Amsterdam, Netherlands) organized an International Conference in virtual mode from 18-19 December 2020.

The central theme of the conference is "Re-Imagining Diffusion of Information Technology and Systems: A Continuing Conversation". This conference provides a virtual platform for scholars, academicians, and practitioners from India and abroad to share their research findings. Other key features include: Four hours' paper development workshop on day zero by Professor Vishwanath Venkatesh, University of Arkansas (USA), an authority in information systems, and three keynote addresses by distinguished IS scholars. The distinguished IS scholars included Professor Vishwanath Venkatesh, Professor Rajiv Kohli William and Mary School of Business, USA, and Prof H. Raghav Rao, The University of Texas at San Antonio College of Business, USA.

We received 240 papers and selected 117 papers for presentations at the conference. Papers covered areas including: Technology adoption, Blockchain, e-Governance, IT& Disaster management, Mobile applications, Smart cities, Social media and Artificial Intelligence and systems. A total number of attendees were 125 including 49 doctoral scholars from 82 institutions representing 24 countries. There were 15 Tracks, 58 Session Chairs, 29 Technical Sessions in the conference. Finally, 5 papers were selected based on reviewer's comments and rating of 3 professors for "Commendable Paper Awards". All articles presented at the conference are indexed in the **Scopus** database.

IIM Tiruchirappalli managed full online operations of IFIP WG 8.6 conference 2020 with a team of 5 members having capabilities to use zoom platform.

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Evaluative practices and performance indicators for digital platforms

By Christos Begkos and Katerina Antonopoulou

Rankings, ratings and reviews permeate digital platforms. They frame what we buy, where we eat, how we travel, how we consume. Their function is simple yet powerful. They streamline complex structures, quantify qualitative traits, place things in hierarchical orders and popularise their subject matter. Digital platforms offer evaluative infrastructures that 'consist of an ecology of accounting devices in the form of rankings, lists, classifications, stars and other symbols ('likes, 'links', tags, and other traces left through clicks) which relate buyers, sellers, and objects' (Kornberger et al., 2017, p. 81; Constantinides et al., 2018). Yet, in a digital setting without rankings, lists and other classifying devices, what constitutes 'good', 'successful' or 'popular' and how do people perceive such abstract notions?

In our recent work, we explored this question through an in-depth investigation of Instagram, which, unlike most other digital platforms, is devoid of rankings, ratings and reviews. Instagram only has a few 'judgement' devices (Karpik, 2010) available to accommodate commensuration, such as users' number of followers and likes. Yet, Instagram users can easily 'game the system' and fabricate such performance measures, for example, through purchasing metrics from third-party sources. Our study investigated how Instagram users evaluate digital platform content in the absence of well-defined performance measures.

Our findings indicate that lay Instagram users broadly perceived that large volumes of likes, comments, but mostly followers, were tangible indications of 'successful' user accounts. Such perceptions led to 'tit-for-tat' tactics through which users would seek the reciprocal exchange of likes, comments and follows between unconnected users, to up their metrics. Users also engaged in activities which were often frowned upon by the Instagram community, such as engaging in 'follow-unfollow' and lobbying tactics. Users often procured engagement to fabricate their visible metrics, reflect a seemingly successful account and blur others' evaluations of their performance.

Taking advantage of lay users' understandings, our findings indicate that experienced users would often mould their profiles' visible metrics into facades of what is perceived as a successful profile. The absence of well-defined performance measures encouraged experienced users to engage in calculative practices in search for 'cheating' signs and to discern legitimately successful profiles, such as 'follower-following' ratios and 'follower-like' comparisons.

Our research argues that the lack of rankings, ratings and reviews welcomes users' calculative practices that aim to evaluate performance and assess the credibility and trustworthiness of ill-defined performance measures. The lack of classification devices forces actors to devise their own performance measures, thus invoking an 'ecology' of implicit calculative practices (e.g., 'follower/following' ratios). Our study argues that, although such practices may lack specificity or credibility, they are powerful enough to bring together multiple actors, businesses and teleologies.

Our findings provide insight on how Instagram users fabricate performance metrics, what they perceive as 'good' online content and what constitutes an 'impactful' user account or a 'successful' social media campaign. Such findings are valuable to entrepreneurs and practitioners who seek to evaluate digital platform performance in the absence of robust judgement devices.

<u>Dr Christos Begkos</u> is an Assistant Professor in Management Accounting at Alliance Manchester Business School, University of Manchester, UK. His research explores the nexus of performance measurement and digital technologies in healthcare, entrepreneurial and social media settings. His research has been published in *Critical Perspectives in Accounting; Accounting, Auditing & Accountability Journal; Technological Forecasting & Social Change;* and *Public Money & Management*. Christos can be contacted at Christos.Begkos@manchester.ac.uk and on Twitter Qchristos begkos.

Dr Katerina Antonopoulou is an Assistant Professor of Information Systems at University of Sussex Business School, Brighton, UK. Her expertise is in the areas of digital innovation, business models and digital business strategy while her research interests include topics related to digital transformation as well as digital entrepreneurship. Katerina's research has appeared at high quality journals and conferences in the field such as *Technological Forecasting & Social Change; Accounting, Auditing & Accountability Journal;* the *International Conference on Information Systems;* the *European Conference on Information Systems;* and the *Academy of Management.* She can be contacted at <u>k.antonopoulou@sussex.ac.uk</u>.

This blogpost has drawn from research that was presented in the following publications:

Begkos, C. and Antonopoulou, K. (2020). Measuring the unknown: Evaluative practices and performance indicators for digital platforms. Accounting, Auditing & Accountability Journal, 33(3), pp. 588-619.

Constantinides, P., Henfridsson, O. and Parker, G.G. (2018). Introduction—Platforms and infrastructures in the digital age. *Information Systems Research*, 29(2), pp. 381-400.

Karpik, L. (2010). *The economics of singularities*. New Jersey: Princeton University Press. Kornberger, M., Pflueger, D. and Mouritsen, J. (2017). Evaluative infrastructures: Accounting for platform organization. *Accounting, Organizations and Society*, 60, pp. 79-95.

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WISE14

The 14th World Conference on Information Security Education 22nd to 24th June, 2021

Hosted by IFIP TC11 WG 11.8 (Information Security Education) In conjunction with the 36th IFIP TC-11 SEC 2021 International Conference on Information Security and Privacy Protection Oslo, Norway

The IFIP Working Group 11.8 - Information Security Education will hold the fourteenth World Conference on Information Security Education (WISE14) in order to advance the state of computer security and information assurance education throughout the world. To that end, we invite practitioners, researchers, policy makers, and others from academia, industry, and government to submit papers for presentation and topics for working group discussions to WISE14. We will organize the conference around paper presentations and potential working group topics. All presentations and discussions will be in English.

WISE14 will be held in conjunction with the 36th IFIP TC-11 SEC 2021 International Conference on Information Security and Privacy Protection. See the WISE14 web site http://www.ifiptc11.org/wg118-events/WISE14 and the 36th IFIP SEC2021 web site see https://ifipsec.org/2021/

The theme for WISE14 is "Information Security Education for Cyber Resilience". We solicit submissions on all relevant topics including, but not limited to:

The conference will feature general paper sessions and a working group session.

Paper submissions should follow the guidelines for full paper submission using the template that can be found at http://www.ifiptc11.org/wg118-events/WISE14#authors-guideline. Papers are to be submitted through EasyChair at

https://easychair.org/my/conference?conf=WISE14. The submissions for WISE14 will be reviewed separately from IFIP SEC2021. Accepted papers will be published in the WISE14 conference proceedings. Papers must be original work, not previously published, written in English, and at most 14 pages long including references and appendices. All submissions will be reviewed double blind and must be submitted in a blinded version (author and institution information removed). Submission instructions are available on the conference website. Acceptance will be based upon originality, contribution to the field, and relevance to the conference. The conference proceedings will be published under the IFIP Advances in Information and Communication Technology Series by Springer (with ISBN and indexed in Scopus) and distributed at the conference.

Submissions for working group topics should describe in no more than 500 words the topic of the working group, its relevance to IFIP TC11 WG11.8, the goals to be achieved during WISE, and the plans for continued collaboration after WISE.

Important Dates

Deadline for submission of full papers and working group abstracts	January 28, 2021
Notification of authors and Programme Published	March 8, 2021
Delivery of Camera-ready papers by authors	March 24, 2021

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HCSE 2020, the 8th International Working Conference on Human-Centered Software Engineering, organized by IFIP Working Group 13.2 on Methodology for User-Centred System Design in cooperation with Working Group 13.5 on Resilience, Reliability, Safety and Human Error in System Development was held virtually due to the COVID-19 pandemic on December 1–2, 2020. Originally it was planned to run the conference at Eindhoven University of Technology in The Netherlands. Eventually, is was carried out as an online Zoom meeting hosted by the Software Innovation Campus at Paderborn University (SICP) in Germany.

HCSE aims at bringing together researchers and practitioners interested in strengthening the scientific foundations of user interface design, examining the relationship between software engineering and human-computer interaction and on how to strengthen human-centered design as an essential part of software engineering processes.

HCSE 2020 was focused on the interdependencies between user interface properties and the question how stakeholders and developers value diverse user interface properties and how they manage conflicts between them. The program of HCSE 2020 combined three technical paper sessions and a demos & posters session. All sessions contained presentations with associated questions & answers and provided significant time for moderated discussions. Technical sessions were dedicated to the following themes:

User-Centred Design Approaches Model-Based and Model-Driven Approaches Software Development Strategies

With almost 70 registered participants, the online edition of HCSE attracted significantly more attendees than the bi-annual physical events in the years before. The annual business meeting of WG 13.2 which is traditionally co-located with the conference, happened on the day before the conference.

The Proceedings of HCSE 2020 are published by Springer in the Lecture Notes in Computer Science series, <u>LNCS vol. 12481</u>, under copyright of IFIP. The organizers of HCSE 2020 thank all authors and presenters for their contributions, all participants for the active engagement, as well as Springer and IFIP TC 13 for their support!

For more details about HCSE 2020 visit the conference web site at http://hcse-conference.org/. Further information about the WG 13.2 activities and its members can be found at http://ifip-tc13.org/working-groups/working-group-13-2/

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New Secretary General at the Irish Computer Society

The Irish Computer Society is pleased to announce the appointment of Mary Cleary to the position of ICS Secretary General.



Mary brings valued expertise and experience of representing the IT profession in Ireland, particularly at a European level. Mary is Chair of the CEN standardisation committee, Digital Competences and IT Professionalism, and Chair of the Irish National Coalition of the European Commission's Digital Skills and Jobs Coalition.

She advises on European skills policy, and has worked with the European Digital SME Alliance on strategy, contributing to the Commission's Skills for SMEs report (2019) and the Skills for Industry 2030 report (2019).

In addition to championing the voice of the IT profession in public policy debate with government and European institutions, Mary has a particular interest in attracting young people, and especially girls, to the IT profession; in supporting the development of young IT professionals; and in building vibrant identities and networks for each specialism in IT which will foster greater appreciation and

effective collaboration across IT functions and between IT and business.

Announcing Ms. Cleary's appointment, Mike Hinchey, President of the Irish Computer Society, said:

"We are delighted to appoint Mary Cleary as Secretary General at this critical time for the organisation and the IT profession in Ireland. The central role of digital technology in our lives and work has been brought into sharp focus in recent months.

"The increased pace of digital transformation both excites and challenges us as it impacts on all our jobs, our homes, our education, our healthcare. As the ICS, we must support the development of individual IT professionals in Ireland but also represent the voice of the IT profession, distinct from the IT industry, in public policy debate.

"Mary's passion for learning, for connections, for Ireland and for Europe provides a new platform for engagement and growth. "I look forward to working with Mary and the ICS Council to develop new approaches and opportunities for the IT profession in Ireland and to provide a strong participation by the Irish IT profession in Europe and globally."

About the Irish Computer Society

The Irish Computer Society has represented the world-renowned IT professionals of Ireland since 1967, and is the Irish IT professional body for the youngest, most productive and best educated IT workers in Europe. The ICS supports individual IT professionals at every stage of their career journeys, from earliest career steps, mastering best practice, to mature professionals implementing new transformative technologies.

The society actively promotes diversity in its ranks, championing women in IT leadership roles, and the increase in the number and quality of IT graduates in Ireland and in Europe. With extensive membership talent, the ICS leverages its world class expertise to advance national and European policy in digital literacy, and professional level skills development, working on eHealth, cyber security, data protection, and other stakeholder initiatives to ensure continuous improvement through policy, legislation and standards.

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CIOs the catalysts of change for a digital world

CIOs have a crucial and multi-faceted role to play in helping their organisations transform for the digital age. This is according to Sandra La Bella, winner of the Visionary CIO title at the Institute of Information Technology Professionals South Africa (IITPSA) Presidents Awards 2019, and Executive of Information Technology, the Unlimited, who was speaking on the centre stage at the Africa Tech Festival last week.



"We as CIOs need to be the champions of enterprise transformation in the context of accelerated digital disruption," she said. "We can't conform to what was; we need to move into the future. And we can't do it in silos – we need to do it enterprise wide. We are the catalysts of change into the digital world."

To enable their organisations to adapt and thrive in the face of disruption, La Bella highlighted several areas where CIOs had to participate and drive change.

She said CIOs had to take their place at the table when business strategy was defined, in order to build systems to support that strategy: "Make sure as the CIO that you are part of defining the group strategy. You need to understand how that fits into the business architecture, so that when it comes down to having to build the system, you've already been building ahead of time and you're aware of what needs to happen, or you've influenced to make sure that the architecture is correct. Don't work in a silo."

La Bella said CIOs had to champion agility and customer centricity in the organisation: "We must take ownership and influence our organisations, with the right operating models in place and the climate for innovation. We need to ensure that our organisations are moving a lot quicker than they used to in the past. We also need to ensure that our customers are involved when we and our teams define what our digital world and landscape look like."

"Some things we really need to be watching are design and architecture – you, as CIO, hold the key to the future flexibility of your organisation and in order to move quickly with change, your architecture needs to be loosely coupled; built up of services that can be plugged and played as you need them, keeping agility," she said. She cautioned against retaining legacy platforms for too long: "The problem is, when you start putting your new world of digitisation on top of it, your old legacy platforms start making it extremely difficult to do this, and your competitors are getting the edge. You're left with heavy costs and you won't be able to move with the speed that you need to."

"In the new world of digitisation, user experience and user interface is being built into your architecture, and your design is extremely important. You have to make sure the user experience and user interface are built at the appropriate levels, so employ experts to do this; it makes a world of difference. CIOs must also keep the reduction of costs in mind when designing and architecting. Watch the cost to income ratios and make sure that you are putting things into the cloud and designing with the reduction of costs in mind," she said.

La Bella said CIOs also needed a number of soft skills to help their organisations thrive amid digital disruption. "We need to be influencing how our organisations are thinking, so that they too can become digital disruptors. We need to make sure that our communication is clear; become good negotiators and build the right relationships to develop enterprise-wide influence."

"Are you the champion of enterprise wide change, and therefore are you enabling accelerated digital disruption in your organisation or not?" she asked.

Excellence in adversity

Recognising the importance of IT professionals in helping their organisations navigate disruption, the 2020 IITPSA President's Awards are themed 'Excellence in Adversity'. The annual awards recognise the IT Personality of the Year, Visionary CIO of the Year, and also include awards for Technology Excellence and Social Responsibility/Community.

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(Continued from page 12)

IITPSA CEO Tony Parry says: "The Covid-19 pandemic and lockdown have illustrated how crucial ICT is to the functioning of all organisations, but enabling business as usual in this challenging time has put heavy pressure on ICT professionals. This year's awards will celebrate those who enabled their organisations to survive and grow despite particularly challenging circumstances." Judging is currently underway in the annual awards, and winners will be announced in the first quarter of 2021.



Caption: Sandra La Bella, winner of the Visionary CIO title at the Institute of Information Technology Professionals South Africa (IITPSA) Presidents Awards 2019, and Executive of Information Technology, the Unlimited, who presented on the centre stage at the Africa Tech Festival this week.

Issued by ITP Communications on behalf of the Institute of Information Technology Professionals South Africa (IITPSA)

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IITPSA's Senele Goba accepted into U.S. TechWomen programme

SA ICT entrepreneur and educator to participate in international development initiative Senele Goba, Director of 4IR Innovations, founder of Ososayensi Education Advancement NPO and non-Executive Director of the Institute of Information Technology Professionals South Africa (IITPSA), has been awarded a place in a U.S. State Department TechWomen programme for 2020.



TechWomen is an international programme that aims to empower, connect and support the next generation of women leaders in science, technology, engineering and mathematics (STEM). Launched in 2011, TechWomen is an initiative of the U.S. Department of State's Bureau of Educational and Cultural Affairs (ECA) and is managed by the Institute of International Education

(IIE). Goba says she has been informed that this year's programme attracted over 3900 of nominations and applications from around the world. "I am very excited to be one of the 108 women awarded a place in the programme," she says. "It encompasses mentorship and networking on virtual platforms as well as a five-week visit to Silicon Valley in the U.S. next year."

Goba hopes the programme will help her expand her efforts to boost interest in STEM and ICT at school level, through her Ososayensi Education Advancement non-profit programme and her participation in the IITPSA KwaZulu Natal chapter Board and national board.

Ososayensi Education Advancement is a community development NPC aimed at exposing young learners to STEM and the beneficial use of Science, Technology and Innovation to increase their chances of successfully pursuing technology-related careers. Says Goba: "To date, I have been involved at a local level, but I have bigger dreams for the organisation. I hope the TechWomen programme will help me expand the reach of our initiatives, secure collaboration and mentorship, and – hopefully – some donors to help fund this education advancement."

She notes that girls and young women need additional support and encouragement to enter STEM and ICT fields. "I have noted in my work with young learners in programmes such as coding and innovation workshops that there is a lack of information on careers in STEM and ICT – particularly in disadvantaged areas. Many of these learners are not aware of the opportunities, as a result they don't even consider they could become producers rather than consumers of solutions," she says.

"STEM and ICT are also often seen as something boys will do, rather than girls. Unfortunately, many influencers such as teachers and parents have the same views – that boys do better in science, technology and maths, so they encourage more boys into the field. Interestingly, in our coding classes last year, we ended up with 85 - 90% girls and just a few boys in the class, which shows it's not that girls don't want get involved - they do, and they do very well." As a mother of boys herself, Goba says boys should not be left out of STEM and ICT development efforts, however. "We just need to level the playing field," she says.

Goba, recently elected as a non-executive Director of the IITPSA nationally, also hopes to contribute her passion for education and development to the IITPSA's work. "I hope to get involved in the wonderful development programmes IITPSA has, including the Computer Olympiad, empowerment of girls and women in ICT and the continued professional development of IITPSA members. Career development is an important strategic objective within the Institute, since times are changing and all members need to keep growing ourselves to remain relevant."



Caption:

Senele Goba, Director of 4IR Innovations, founder of Ososayensi Education Advancement NPO and non-Executive Director of the Institute of Information Technology Professionals South Africa (IITPSA), has been awarded a place in a U.S. State Department TechWomen programme for 2020.

Issued by ITP Communications on behalf of the Institute of Information Technology Professionals South Africa (IITPSA). For further information or hi-res images, please contact kabelo@tradeprojects.co.za or leigh@tradeprojects.co.za

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Professor Jacques Hebenstreit - a remembrance and celebration of his work with IFIP TC3 6.03.1926 - 3.07.2020

Professor Jacques Hebenstreit was the IFIP TC3 Chair from 1979 to 1984.

In the early 1970s, when the seat of IFIP was still in Geneva, Raymond Morel (now the Swiss National Representative to IFIP TC3), received at Collège Calvin a visit of a delegation of IFIP people, with Professor Jacques Hebenstreit among them. After a talk from Jacques on developing competencies for students in ICT, Raymond expressed his total disagreement, based on Raymond's concrete experiences. Concern arose in the room, with people telling Raymond that "this is the famous expert Jacques Hebenstreit", but Raymond maintained his position, and Jacques added, "this young colleague is quite right - I was wrong". For Raymond, this was a curious way to enter, for decades following, strong, fruitful, efficient, friendly and frequent collaborations with Jacques about important thematic topics relating to introducing ICT into education.



Jacques Hebenstreit was a famous expert, with a global view about what should be an effective integration of ICT for citizens, future citizens and society. In discussions, he always demonstrated his advanced awareness of the evolution of hardware, software and telecommunications; but nevertheless, his views always considered ways that accommodated effective and humanistic needs. His dynamic approach was well appreciated, certainly because of the thinking and ideas he brought that offered prospective views.

In frequent exchanges and discussions of Jacques Hebenstreit with Raymond, key themes were shared with colleagues for subsequent discussions at meetings. If no solutions resulted, then the theme was transformed to provide a topic heading, for a focus at a next working conference, to enable multiple perspectives and viewpoints to accommodate existing diversities of thinking. From the long list of activities that resulted during that time, it is possible to measure how systematic and successful this process adopted by Jacques was.

The way that Jacques Hebenstreit managed meetings was recognized as a marvelous model of management. Jacques certainly had an agenda with items for fixed periods of time, but he was always aware of the time that items would take, accommodating and allowing strong interactions between participants. At the end of these items, Jacques was always able to summarize the strong points arising from the discussions, offered through global views.

After his retirement from IFIP business, he was still willing (acting in a hidden way, 'behind the curtain') to offer IFIP TC3 valuable inputs and advice, always through a critical view that considered future and human perspectives. Jacques was said to take a severe approach (although this might not have been so real, but rather one that was promoted by his colleagues), but was quite willing to collaborate in a friendly way through exchanges.

Whilst we have lost Jacques Hebenstreit, we can continue to value his <u>scientific work</u>, his high-level scientific competencies and strong humanistic values, and seek to emulate and maintain those for ourselves.

Our thoughts are now with his family, to whom we extend our most sincere condolences.

May he rest in peace.

Past and current members and officers of IFIP TC3

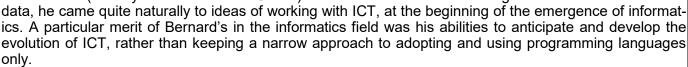
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Professor Bernard Levrat - a remembrance and celebration of his work with IFIP TC3 12.9.1936 - 17.8.2020

Professor Bernard Levrat was the Chair of IFIP TC3 WG3.2 from 1990 to 1995.

When, in 1980, Professor Bernard Levrat proposed to Raymond Morel that he should become his successor as the Swiss IFIP TC3 representative, Raymond was unable to understand at that time what a fabulous gift this was. After 40 years of intensive activity, Raymond can now see what a big and generous action that was. For Raymond, this action was not only a measure of confidence in him, but also a remarkable way and opportunity for continuing Bernard Levrat's great work, which led to a special form of collaboration. Effectively, Bernard always continued to support Raymond's activities (actions and innovative proposals) for 4 decades, without imposing his views but giving collaborative advice to enlarge Raymond's ideas.

Bernard Levrat was a physicist in the atomic domain, and handled huge quantities of data (namely from activities at CERN). With his concerns for handling



Bernard Levrat was Dean of the Science Faculty in Geneva University (UNIGE) from 1977 to 1980, then vice-rector of that University from 1991 to 1995. He strongly contributed to the creation in 1976 of the Centre Universitaire d'Informatique (University Computer Center), which was the first center of its type in Switzerland, dedicated to research and education. In addition, he played a central role in setting up the network at the University, which gave links to the Internet in the 1980s. As he said, "I was confident with the Internet, but the real difficulties were the political challenge in bringing University professors to use the infrastructure!"

Due to the proximity of UNIGE to CERN, and working as an initial gateway to the European Internet, Bernard Levrat's wider vision for networking development was quickly put into action from 1985. With colleagues, he continued to put in place networks at all Swiss universities. In addition, Bernard Levrat was very active in developing networking for the Swiss French and Swiss Italian libraries. In 2002, Bernard Levrat received the University of Geneva medal.

After his retirement from IFIP business, he was still always willing to offer relevant observations, comments or ideas in a collaborative and enthusiastic manner.

Whilst we have lost Bernard Levrat, we will look to his high-level scientific competencies and strong humanistic values, and seek to maintain these for ourselves.

Our thoughts are now with his family, to whom we extend our most sincere condolences.

May he rest in peace.

Past and current members and officers of IFIP TC3

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Professor Yaacov Katz - a remembrance and celebration of his work with IFIP TC3

It was with true regret that IFIP TC3 members heard of the sad loss of a good friend and colleague, involved in the work of IFIP TC3 for so many years. Professor Yaacov Katz has left us with truly fond memories; his work is and will be cherished, and not forgotten.

Professor Yaacov Katz was known to us as a highly competent scientist, with a warm and welcoming personality; he was at the same time positive, intense and focused on matters and people around him. His psychological views and knowledge always brought extra perspectives to our discussions. He was known as a keen but critical researcher. Yaacov was initially involved in IFIP TC3 as a regular member of the former Working Group 3.5, focusing on primary education. With a background in psychology, his work explored important ways that students and teachers could positively gain from uses of digital technologies. In this work, he was recognised equally by IFIP TC3, by his University – Bar Ilan, and by his Ministry – the Ministry of Education in Israel. Indeed, Yaacov was an advisor to the Ministry and Government in Israel for many years.



Yaacov was involved in a wide range of ways in IFIP TC3. He was the local organiser and the chair of the International Programme Committee for the IFIP TC3 conference on "Information Technology: Supporting Change through Teacher Education" held in Kiryat Anavim, Israel in June 1996. In that conference, he ensured the professional and scientific focus, but, as well, maintained an exciting social and cultural atmosphere. Interesting discussions, exchange of experience and knowledge, and the attendance of colourful personalities all contributed to the recognised success of that conference, carefully planned and held in a selected venue that was so well furnished to effectively support all participants. The conference was rich in content, as were the organised visits in his country. All those who were privileged to attend hold good memories of the many places we were able to see. Our memories of those places and experiences were refreshed when, year after year, Yaacov never ceased to send his greetings to us for the Jewish New Year.

More recently, Yaccov did a great deal to support the IFIP TC3 journal, "Education and Information Technologies", both as an Editorial Board Member and as a reviewer. He was always ready to help, and colleagues remember so well working with Yaacov, very much valuing his clear thinking and knowledge. In recent years, Yaacov was a regular and important contributor to the work of the IFIP TC3 Task Force on the Computer Science Curriculum. In this context, as on many other occasions, he contributed papers and presentations, either as a single author, or working collaboratively in conjunction with others.

Now that Yaacov has passed away, we will keep and cherish all the good memories he gave us and remember him as the warm and good person he was. We lose a good colleague and a good friend, and a person with strong humanistic values. When he attended conferences and meetings, he was often accompanied by his wife, so that they might enjoy some holiday time linked to the event. Our thoughts are now with his wife and family, to whom we extend our most sincere condolences.

May he rest in peace.

Past and current members and officers of IFIP TC3

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Some of forthcoming IFIP events. For a full list of events, please look at http://www.ifip.org

8th Artificial Intelligence for Knowledge Management http://ifipgroup.com/	8thAI4KM	07/01-08/01 2021 online	IFIP WG12.6 / IFIP TC12
Wireless On-demand Network systems and Services http://2021.wons-conference.org	WONS	09/03-11/03 2021 Klosters, CH	IFIP WG6.3 / IFIP TC6
International Conference on New Technologies, Mobility and Security http://www.ntms-conf.org	NTMS	19/04-21/04 2021 Paris, FR	EFREI, TELECOM ParisTECH
The 17th International Conference on Open Source Systems https://oss2021.org	OSS2021	12/05-13/05 2021 Lahti, FI	IFIP WG2.13 / IFIP TC2
6th IFIP WG 13.6 Working Conference: Human- Work Interaction Design (HWID'21) – Artificial Intelligence and Designing for Positive Work Experience in Low Desire Society https://www.hwid2021.com	HWID2021	15/05-16/05 2021 Beijing, CN	IFIP WG13.6 / IFIP TC13
IFIP/IEEE International Symposium on Integrated Network Management https://im2021.ieee-im.org	IM 2021	17/05-21/05 2021 Bordeaux, FR	IFIP TC6 WG 6.6 / IEEE COMSOC
Fundamentals of Software Engineering http://fsen.ir/2021	FSEN 2021	19/05-21/05 2021 Tehran, IR	IFIP WG2.2 / IFIP TC2
IFIP 9.4 2021 – Virtual Conference http://ifiptc9.org/wg94/ifip-9-4-conferences/	9.4 Virtual 21	26/05-28/05 2021 Virtual	IFIP WG9.4 / IFIP TC9
25th International Conference on Optical Network Design and Modeling https://ondm2021.chalmers.se	ONDM	31/05-03/06 2021 Gothenburg, SE	IFIP WG6.10 / IFIP TC6
	17th IFAC Symposium	07/06-09/06 2021 Budepest, HU	IFAC TC 5.3 "Enterprise Integration and Networking"
The 51st IEEE/IFIP International Conference on Dependable Systems and Networks dsn.org	DSN	21/06-24/06 2021 Taipei, TW	IEEE Computer Society / IFIP WG10.4
IFIP Networking Conference 2021 https://networking.ifip.org/2021/	IFIP Networking	21/06-24/06 2021 Espoo, Helsinki, FI	IFIP TC6 / IEEE Comsoc technical sponsorship / Federation of Learned Societies (Finnish government)
23rd International Conference on Descriptional Complexity of Formal Systems sangkiko@kangwon.ac.kr	DCFS 2021	21/06-24/06 2021 Seoul, KR	IFIP WG1.2 / IFIP TC1
Doctoral Conference on Computing, Electrical and Industrial Systems http://doceis.dee.fct.unl.pt	DoCEIS`21	07/07-09/07 2021 Caparica (Lisbon), PT	SIFIP WG 5.5 /OCOLNET - Society of Collaborative Networks

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