IFIP Position Paper on e-Waste

ICTs are often presented as tools that are put to use towards desirable outcomes, including sustainability. ICT for sustainability and Green IT are increasingly promoted as fields that will produce new knowledge for more sustainable products and practices. But in the discourse on the new role of ICT, the sustainability of ICT itself remains invisible. An IFIP Position Paper – led by TC9 Chair David Kreps and published in June 2019 – sets out some of the detail of the problem, as it currently stands, and what role the International Federation for Information Processing affirms it can play in trying to redress it.

http://www.ifip.org/images/stories/ifip/public/Announcements/e-waste%20position%20paper%20june2019.pdf

Austrian IFIP AI Forum 2019

The first Austrian IFIP AI Forum, organized by TC12 in collaboration with BMVIT (Federal Ministry of Transport, Innovation and Technology, Austria) took place in the building of BMVIT, Vienna May 8-9, 2019. It was devoted to various aspects of Artificial Intelligence and its positive and negative impacts on Society. After the welcome by President Mike Hinchey and Michael Wiesmüller (BMVIT) two invited talks Stephen Ibaraki (IP3) and Prof Sir Roger Penrose presented complementary lighting on AI : first more business oriented and second based on modern physics on the capacities of human and machines.

Michael Wiesmüller (BMVIT) IFIP President Mike Hinchey Sir Roger Penrose

According to initial objectives the 13 speakers from IEEE, EU, academia and companies covered a large spectrum of AI with perfect mix of theoretical reflections, trends and operational applications for health care, transportation, retail efficiency, computer games and robotics. Each talk included a discussion on the impact of AI on society in terms of reasoning, assistance, entertainment, influencing behaviors and synergy human-machine. Some perspectives on AI governance and ethics were also addressed and finally we opened a discussion on principles to follow for collaborating safely to build a world empowered by AI. This topic is open for continuous contribution.

It was decided that the next Austrian AI Forum will take place in 2020.

IFIP WG 8.6 Doctoral Consortium and Working Conference in Accra June 2019

ICT unbounded, Social Impact of Bright ICT Adoption was the theme of the IFIP Working Group 8.6 that took place at the University of Ghana, Accra on 21st – 22nd June 2019. The two-day conference sought to understand progress in Bright ICT initiative by Professor J. K. Lee and how it affects by individuals, organizations, and society. Prof. Lee delivered virtual talk on the Bright ICT to attendees. In all 38 papers were accepted for presentation covering broad areas including: Technology adoption, BI, Smart cities, Security & Privacy and Social media and open computing. In all 58 attendees from 19 countries were present at the conference.

Professor Yogesh Dwivedi addressing the business meeting

Ghana's Minister for National Security at the office of the President delivered the keynote address. He talked about progress in the digitalization of most sectors of the Ghanaian economy.

" a lot of digitization is being implemented across the country, for instance, there is an ongoing restructuring of the security architecture in terms of technology to bring it up to the level of other Advanced countries"

Preceding the conference, a one-day doctoral consortium was organized to help train young African scholars in academic research. In all 26 doctoral students, consisting of mostly female students, were mentored by 19 renowned scholars including several editors and senior editors of highly ranked scholarly journals. The consortium was enriching to most of the doctoral students*.*

The Hon. Minister of State in Charge of National Security delivering his keynote address

"My mentors immensely contributed to my research work and their suggestions will fine tune my research work. The Conference and Doctoral Consortium has really helped me to learn new things especially in Information System and also increase my horizon." Ibitowa Folashade Olukemi (Mrs), University of Ibadan

Several individuals were recognized for contributing to the success of the program. Of special note was the recognition of Prof. H. R. Rao's services to IFIP over the years.

Prof. George Kasper presenting Prof H.R. Rao with his award

The Hon. Minister of State in Charge of National Security Bryan Acheampong present Prof. Ayaburi with a memento

The Hon. Minister Bryan Acheampong (Left) presenting a memento to Prof Yogesh Dwivedi (General Chair of IFIP WG 8.6 working Conference)

(Continued from page 2)

With the generous help of Ghana's Minister of State in Charge of National Security, The Honourable Bryan Acheampong the three-day program was climax with sightseeing at the famous Elmina Castle which is recognized a world heritage site.

We will like to acknowledge the contributions of the UNESCO Participation Programme (9290118271) and IFIP TC 8, Information Systems, for sharing in the underwriting of the event and to University of Ghana for local arrangements and their warmth, hospitality and facilities.

For more information, visit http://ugbs.ug.edu.gh/ifipwg86-2019/index.html

---

20th conference of IFIP WG 8.3 Decision Support (DS)
24-26 June 2020, in Wroclaw, Poland

The theme of the conference is "Toward enhanced risk management shaping risk culture theory and making sound decisions under pressure." See http://www.ifip2020dss.com/. The deadline for submission is 15 December 2019.

The conference consists of a multidisciplinary platform of knowledge and practice exchange. Suggested topics include, but are not limited to:

> decision-making in uncertainty and/or danger conditions
> relevant case studies
> risk management in decision-making processes
> social, ethical and moral risk aspects
> determinants, constraints and situational-organizational factors in decision-making processes
> food safety
> technical, social and personal aspects of decision-making processes
> international safety and security
> reliability and service delivery continuity of critical systems
> risk resulting from participation in a hybrid war or actions below the threshold of war
> psychological aspects of decision-making in crisis conditions
> risk in the context of conditions arising from the International Humanitarian Law of Armed Conflicts
> models of decision making under risk and uncertainty
> risk during the execution of tasks as part of peace missions
> development in DSS methodology, architecture, components, integration and software tools
> response to terrorism and cultural threats – theory and practice

IMPORTANT DATES
> Deadline for submission: 15th December 2019
> Notification of acceptance: 15th February 2020
> Camera-ready copy due: 31th March 2020

IP3 News

David O'Leary Prize by REDDS Capital - Call for Nominations

IFIP IP3 wants to acknowledge an individual or organisation that has promoted and demonstrated Professionalism (Professional Practice) in ICT, has worked as an Ethics Evangelist, and/or has made strides in fostering diversity among ICT practitioners. The winner will receive a cash prize of USD1,500, and the individual or organisation's representative will be funded to travel to IFIP's General Assembly in Kiev, Ukraine on 12 October 2019, to receive the prize.

We urge the IFIP community to circulate this to your communities. We need some nominations to get the process going, so please think carefully about someone who you would like to nominate. Click here for more information, and to download the nomination form. Let's make this happen.

World Summit for Information Society (WSIS)

As a supporting partner, IFIP were invite to participate in a **High-Level Strategic Dialogue** on "ICTs for achieving SDGs" during the Official opening segment. Mike Hinchey invited Moira to speak on behalf of IFIP. The questions she responded to were : How can we make ICT safe for everyone, to ensure that it can support the achievement of the SDGs, and provide economic opportunity without undue risk?; and What role can a global body like IFIP play in achieving ICTs for SDGs? Read more about the session from pages 23 onward on this outcomes document.

Moira accepts certificate from WSIS on IFIP's behalf.
Malcom Johnson, ITU, Moira de Roche, Houilin Zhao (ITU Secretary General), Doreen Bognan, ITU

IP3 presented a **Thematic Workshop** entitled "How do we maximise the benefits of Innovative 4.0 technologies, without unnecessary risks and consequences? As Innovative 4.0 Technologies including AI and algorithmic decision-making bring economic and societal benefits in many areas of our human endeavours, how do we maximise the benefits without exposing our Society to unnecessary consequences and risks?

Moira de Roche chaired the session, and Stephen Ibaraki addressed "Life and Enterprise with Industry 4.0 to Society 5.0 and the 5th Machine Age—investments, the landscape, disruptive technologies and economic opportunities". Sadly Anthony Wong, who was to present on "Cyber-security – A multi-disciplinary approach", was taken sick, and was unable to deliver his presentations remotely. We did however show some of the slides, so that the subject was not left out. We were delighted to include Austeja Trinkunaite, CEPIS Secretary-General, and Liesbeth Ruoff, KNVI, in the panel. Both are very involved in Initiatives in promoting IT professionalism across Europe. Austeja presented on the standardisation of all four pillars of ICT profession in Europe which is led by TC428 and is part of the European Committee for Standardisation. It is supported by IT Professionalism Europe network which brings together stakeholders to exchange best

practice in maturing the IT profession, whilst Liesbeth provided insights on frameworks to support digital skills, explaining that people are the distinctive factor. The workshop was closed by Mike Hinchey, who commented on all the subjects covered.

Seated from left: Stephen Ibaraki, Liesbeth Ruoff, Moira de Roche, Austeja Trinkunaite, Mike Hinchey

Moira was invited to join the panel of a Thematic Workshop hosted by The Trustless Computing Certification body, to discuss Trust and how it can be developed by all concerned.

The WSIS Outcomes document can be found here.

Stephen Ibaraki's engagements

Stephen has held interviews and recorded chats with many luminaries, inclsuing several senior IFIP representatives. They are too numerous to list, but can all be found here.

Other activities:

Founder, AI for Good Global Summit, latest edition 2019, the largest interdisciplinary summit Journey for "AI for Good" 2015-2020 https://www.linkedin.com/feed/update/urn:li:activity:6540433647948967936

Opening Keynote AI Vienna organized by IFIP and hosted by Austrian Government http://www.ifiptc12.org/component/rseventspro/event/45-first-austrian-ifip-forum-ai-and-future-society?fbclid=IwAR3xzO4tSJTXx6TOJoKeEf_T79TW9DUg0_BzxVFZWEExLFM54EPqUuZTerU

Opening Keynote Kingfomarket 2019, largest private conference in gaming, hosted in Barcelona

Two different opening keynotes, day 1 and day 2, IEEE Conference hosted by Georgia Tech Research Institute, IEEE TEMSCON 2019 Atlanta https://www.temscon.org/program/

Stephen has also penned several articles for Forbes and IT World. Click on the links to read these and follow on LinkedIn so you don't miss any of these excellent topical articles.

Meeting with CSTD (UN Commission on Science and Technology for Development)

As we were in Geneva, we took the opportunity to meet with Shamika Sirimanne and her team at CSTD, to discuss our proposal on Global Digital Skills. They endorsed the project, agreeing that it is very important work, and will afford us assistance in every way they can. We hope they will be able to introduce us to organisations and groups that will be interested in funding all or some of the project. Project Leader, Liesbeth Ruoff, is in touch with the contact

(Continued from page 5)

person at CSTD. If you are interested in seeing the project proposal, please contact us.

Framework for AI and Ethics

The Australian Government has published a consultation paper, *Artificial Intelligence: Australia's Ethics Framework*. The discussion paper considers the principles which underpin the use and design of artificial intelligence (AI) technologies: https://consult.industry.gov.au/strategic-policy/artificial-intelligence-ethics-framework/.

Eight principles were identified to support the ethical use and development of AI in Australia:

Generates net benefits: The AI system must generate benefits for people that are greater than the costs.

Do no harm: Civilian AI systems must not be designed to harm or deceive people and should be implemented in ways that minimise any negative outcomes.

Regulatory and legal compliance: The AI system must comply with all relevant international, Australian local, state/territory and federal government obligations, regulations and laws.

Privacy protection: Any system, including AI systems, must ensure people's private data is protected and kept confidential and prevent data breaches that could cause reputational, psychological, financial, professional or other types of harm.

Fairness: The development or use of the AI system must not result in unfair discrimination against individuals, communities or groups. This requires particular attention to ensure the "training data" is free from bias or characteristics which may cause the algorithm to behave unfairly.

Transparency and explainability: People must be informed when an algorithm is being used that impacts them and they should be provided with information about what information the algorithm uses to make decisions.

Contestability: When an algorithm impacts a person there must be an efficient process to allow that person to challenge the use or output of the algorithm.

Accountability: People and organisations responsible for the creation and implementation of AI algorithms should be identifiable and accountable for the impacts of that algorithm, even if the impacts are unintended.

The discussion paper also summarises a range of global and national bodies in the process of developing ethical principles and frameworks for implementation of AI. Anthony Wong, who took part in the submission, indicated that one of the key challenges in implementation will be getting organisations to think beyond what they can do, to what they should do when developing and delivering AI-based systems.

IP3 Newsletter article compiled by Moira de Roche editor@ipthree.org

IFIP Networking Series Insights (TC6)

The IFIP Networking event series forms the flagship conference from IFIP TC6 – the Technical Committee on Communication Systems. It started in 2000 as a joint event of combining the Broadband Communications, Performance of Communication Networks, and High Performance Networking conferences, which date back partially to 1981. The main objectives of IFIP Networking are to bring together members of the networking community from both academia and industry, to discuss recent advances in the broad and quickly-evolving fields of computer and communication networks, and to highlight key issues, identify trends, and develop visions for the networking domain overall.

As such the past year's event IFIP Networking 2018 in Zürich, Switzerland in May 2018 with the General Chair of Burkhard Stiller was run as a two parallel tracks event with three keynotes from industrial and academic speakers, including the topics of "Blockchain for Cyber Physical Systems", "Flexibility Matters: On the Design and Evaluation of Softwarized Networks", and "Artificial Intelligence in Network Operations and Management", one panel on "Security and Privacy in the Internet of Things", 14 full paper sessions, 2 short paper sessions, and a poster session.

Unfortunately, during early 2019 one of the three 2018 TPC Co-chairs, namely James P.G. Sterbenz, passed away unexpectedly. The community will remember his dedication, his pin-pointing way of addressing technical problems – among other events especially in Zürich, while organizing and running the panel just named above –, and his support and discussion with colleagues on their various research and career paths.

(Continued from page 6)

During the IFIP Networking 2019 event in Warsaw, Poland in May 2019 with the General Chair Krzysztof Szczypior-ski, James' field of research was memorized specifically via a small exhibition of papers overviewing his research, combined with a poster, and an obituary within the program's booklet.

The IFIP Networking 2019 in Warsaw event did see 3 keynotes from academia on "New Research Directions in Routing: Beyond Sequence Numbering, Routing Modalities, and Destination-Based Routing Table", "Toward Self-* Networks", and "User-centric Privacy and Security in the Networked World" complemented with a little smaller program within one track and with 7 full paper sessions and a poster session.

The look into the future tells that IFIP Networking 2020 is planned for in Paris, France in June 2020, for which all details of the Call-for-Papers, the committees, and venue information are linked from the IFIP Networking Series home page https://networking.ifip.org/. Consider the submission of a paper by end of December 2019!

Within this context it is important to mention that IFIP Networking is guided by a respective Steering Committee, which was chaired in the past by Jordi Domingo-Pascual. Since his term will end this Summer 2019, many thanks are expressed to him from TC6 for guiding, forming, selecting, and deciding reliably on various major and minor steps in the past IFIP Networking series - it was wonderful to see Jordi being successful and well respected by all the past IFIP Networking Organizing Committees. As of Fall 2019 Andrea Passarella will take over the role of the Steering Committee chair. Thus, TC6 extends a warm welcome to Andrea – well known already within TC6 and beyond – and wishes all the best for his future endeavors within the IFIP Networking series and all people involved therein.

Burkhard Stiller
IFIP TC6 Chair

14th IFIP TC9 Human Choice and Computers Conference:

Human-Centric Computing in a Data-Driven Society
Tokyo, Japan, 9th-11th September 2020
www.hcc14.net

Venue: Faculty of Global Informatics (iTL), Chuo University, Tokyo.
http://global.chuo-u.ac.jp/english/siteinfo/visit/ichigaya/

People First : One Can Hide the Data but Not the Truth

We are now living in a "data-driven society". Data is seen as the source of value in the new digital age and creates added value for growth. The development of IoT especially enables the collection of enormous amounts of data in a range of ways and a variety of forms which can spread around the world. Data utilization is likely to continue to expand and become more and more important across all sectors of society, as the spread and penetration of automation unfolds in the coming years.

All those engaged with trying to shape the technologies of today are in some sense oriented toward the future. Is the future bright? And if so who and what will make it so ñ and for whom? As individuals and as team members vision and ingenuity are needed to help us realize a positive future for all.

In a data-driven society, all our choices, actions, locations, emotions, and behaviours are monitored, measured, interpreted, compared, and rated. While data is sometimes called the new oil, also this form of extraction comes with its challenges. In a data-driven society, existing inequalities can be deepened rather than solved (e.g., preventing policing, access to health insurance). While oil was a driver for economic growth, its negative effects on our planet and biosphere remained for long invisible. This time we should do better and investigate not only data as a driver of growth, but also as a driver of change we may not want to see.

The IT Industry is recognizing that a healthy employee work/life balance is essential for long-term enthusiasm and success. It is clear that a strong architectural plan with input from all stakeholders creates a vastly different, participative and delivery-focused working environment. The continued commitment to creating excellence and an atmosphere that embraces change should be the foundational characteristics of the IT Industry in the future. Treating people like they are human beings rather than automata to extract value from, is a concept that should be back in fashion. The digital traces one leaves behind each day reveal more than one knows, and such data is increasingly being used to aid organizations in swaying public opinion (cf. Cambridge Analytica and the Brexit vote / US Elections / India).As the scandals of Surveillance Capitalism (fake news makes more money) come face-to-face with

true human development needs, and the ever-sharpening focus on the need for sustainable solutions, change is needed. It is also paramount to remember, moreover, that our conceptions of being human and hence what we understand within a particular cultural / historical context vary significantly from culture to culture, whilst our notion of what we consider as being human is being increasingly shaped by the technologies that we use.

The coming together of Computing, Control and Communications is resulting in several unforeseen outcomes that are beginning to make 'Being Human' more and more of a challenge.   It is no more a trilogy of human-centric, technology-centric and data-centric practices both in Data Management and Software Engineering. Humanizing in this context entails Privacy, Safety, Security, Human Relationships and Personal Growth; it requires new governance models for new data economy ecosystems. This is proving to be both an answer and a challenge to the productivity paradox in IT and the goal of achieving a positive future.

Human : Machine :: Efficacy : Effectiveness

Data-driven innovations, in short, are increasingly understood as only being successful and fit for purpose if they are favourable for all humanity, and not simply designed to fulfil the priorities of monopolisation and the concentration of wealth in ever fewer hands. Research into these and related issues needs to straddle multiple areas of academic studies, following the principle that technology must be of benefit to humanity and fostering faith in humanity at large is at its foundation.

Since 1974, the Human Choice and Computers (HCC) conference series has consistently fostered innovative thinking about the interfaces between society and technology. †At this time, HCC14 in 2020 focuses on 'Human-Centric Computing in a Data-Driven Society' and welcomes inputs from members of academia and research, civic society, computing associations, industry, and the IT professions on the following (and related) themes:

* Developing New Technologies Using Data for Human Society.
* Ethical and Legal Issues for Data Analytics and Big Data.
* Social Accountability and Responsibility for Computing and Data Utilization.
* Data-work in relation to Gender and Diversity, Work, Educational and Daily Life.
* How data helps to make the world a better place - with a demonstrable focus on the better, and where better is not the same as making organisations richer and CEOs more powerful.
* Harnessing Information with Unconscious Bias
* Legal Systems for Criminal Offences and Abuse
* Ethical governance models for new data economy ecosystems
* How did we get here? Precedents, and lessons from the past.
* How culturally diverse interpretations / understandings of life-work balance, of being human, and slow-tech and techno-feminist understandings of a data-driven society can help us shape a more human-centric computing environment
* Impact on International Security, Intelligence, and War.
* Environmental Impact of Big Data
* ICT for Development: Global Industries, Developing Economies, Sustainability.
* Analysis, design, construction, specification, development and testing of IT artefacts to defined deadlines and exacting standards
* Impact analysis of human endeavour and data analytics
* Security and privacy for big data and data analytics
* Using collaborative skills to work with team members in order to ensure reliability, availability and performance of applications
* Connectivity/digitalization affecting our working and/or private lives
* The view of human nature in a data-driven society

Paper Submission

The conference is open to attendees at all stages of career and education, whether you are at the start, middle or peak of your career, either as academics or practitioners. Submitted papers should be approximately 3,000-5,000 words in length. Please return your paper, using the appropriate format, through www.hcc14.net

The Easychair Submission Link: https://easychair.org/conferences/?conf=hcc14

Chairs:

Conference Chair: Taro Komukai
Program Committee Chairs: Taro Komukai, David Kreps, Gopal TV, Kaori Ishii
Organizing Committee Chair: Kaori Ishii
Main Editor: David Kreps
Co-Editors: Taro Komukai, Gopal TV, Kaori Ishii

Important Dates
January 31, 2020 ---------------------- Submissions due
March 31, 2020 ----------------------- Notification of acceptance/rejection
April 30, 2020 ----------------------- Submission of camera-ready papers
July 31, 2020 ------------------------ Deadline for early bird registration
September 9 - 11, 2020 -------------- Conference dates.
May 2019   First Call for Papers

IFIP 16th International Conference on
Product Lifecycle Management
8-12 July 2019, Moscow, Russia

http://www.plm-conference.org

Conference of the **WG5.1** "Global Product development for the whole lifecycle"

(www.ifip-wg51.org)

Since 2003, **the IFIP WG5.1 PLM International Conference** brings together researchers, developers, and users of Product Lifecycle Management (PLM), an ICT and integrated business approach to the collaborative creation, management and dissemination of engineering data throughout the extended enterprises that create, manufacture and operate engineered products and systems.

The conference aims at involving all stakeholders of the wide concept of PLM, hoping to shape the future of this new field and advance the science and practice of enterprise development. The conference is the official conference of the WG5.1 as well as the International Journal of **Product Lifecycle Management** (IJPLM, www.inderscience.com/ijplm).

PLM 2019, the 16th edition of the conference, will be hosted in Moscow by Skoltech the Skolkovo Institute of Science and technology from 8th to 12th July 2019. Beyond the scientific presentations, PLM 2019 dedicates:

   A full day for industry panels and presentations (Siemens PLM Software, Dassault Systèmes, Novolipetsk Steel, Lavochkin association, «NAMI» State Research Centre, Skolkovo Innovation Center startups)

   IFIP Awards for the «Marco Garetti Best Paper» and for the «Best PhD study»

   A visit to Star City, the astronauts training center

   Special Sessions on current socio-economical subjects

   Keynote Speakers (Thierry Chevalier, Head of Digital Design Manufacturing Thrust, Airbus; Mark Norris, NAFEMS, UK; Alexander Smirnov, Russian Academy of Sciences)

   2 days PhD workshop

   Special issues in Scientific Journals

Join us in Moscow next July 2019!

Contacts:

Organization: Clement Fortin at C.Fortin@skoltech.ru

or IFIP WG5.1: Aziz Bouras at abdelaziz.bouras@qu.edu.qa

The working conference on Sustainable ICT, Education and Learning
Conference Web site: https://suza2019.org/

The working conference was organized by TC3 Working Group 3.4 for Professional, Higher and Vocational Education in ICT, in collaboration with other TC3 WGs and The State University of Zanzibar. It brought together researchers, students, teachers, entrepreneurs and policy makers that deal with the issues on ICT, education, and learning, especially in the Global South. The conference took place on 25th – 27th April, 2019, in Zanzibar, Tanzania.

The working conference gathered about 40 participants from different continents, and had a strong local representation from East Africa. It included 28 session paper presentations, a keynote, and demonstrations from State University of Zanzibar. The keynote by Mr. Aape Pohjavirta from Funzi, a mobile learning company based in Finland, stressed the importance of applying light-weight, relatively low-tech solutions for e-learning in the Global South. Mobile solutions are able to reach students even in poor and remote areas. Many of the papers also dealt with issues of e-learning and ICTs in developing country settings, allowing participants to exchange views on challenges of deficient infrastructure and funds. In addition to educational technologies, many papers introduced pedagogical solutions and innovations both in developed and developing countries.

First two conference days were held in the Seacliff Resort and Spa outside Zanzibar City. On Saturday, the State University invited participants to their premises, where we were shown the laboratories for e-learning and videorecording, and the drone lab. Moreover, the hospitality students prepared and served delicious spice tea and a sumptuous lunch. Participants were taken for a walk in the historic Stone Town after the lunch.

The organizing team of SUZA2019 included chairs prof. Mikko Ruohonen, Dr Nicholas Mavengere and Dr Jaana Holvikivi from Finland, editor prof. Arthur Tatnall from Australia, and local organizers Vice Chancellor Idris Rai and lecturer Sais Yunus from State University of Zanzibar, Tanzania.

IFIP Presentation at the U.N. in Geneva

At the International Federation for Information Processing's (IFIP) World Computer Congress (WCC) 2018 in Poznan, Poland, last September, Shamika N. Sirimanne, the Director of the Division on Technology and Logistics at UNCTAD, called for Collaboration between the United Nations Commission on Science and Technology for Development (CSTD) and IFIP. IFIP is a UNESCO-affiliated body (IFIP will be celebrating its 60th Birthday in UNESCO's Paris HQ in Spring 2020) and closer links between the organisations are being sought and forged from both directions.

The two priority themes and two additional concerns for the 22nd session of CSTD, in May 2019, were:

1. Assessing the impact of rapid technological change on sustainable development;
2. Defining the role of science, technology and innovation in building resilient communities, including through the contribution of citizen science.
3. Exploring frameworks for monitoring AI and machine learning algorithms;
4. Identifying how frontier technologies might increase or decrease existing digital divides.

TC9 is therefore the stand-out part of IFIP that should lead the response to this call for collaboration, and David Kreps, as TC9 Chair, has been responsible for spearheading this response.

As a part of this activity Professor Mike HINCHEY (President of IFIP, President of Irish Computer Society), Emeritus Professor Don GOTTERBARN (ACM Representative on TC9, Chair SIG 9.2.2) Professor Chrisanthi AVGEROU, and David Kreps presented to the 22nd Session of the CSTD on the afternoon of 14th May 2019 in the Palais des Nations in Geneva, on the theme of "AI & Ethics in the developing world".

It was an excellent hour attended by over 50 delegates from around the world, along with Shamika Sirimanne and representatives from the UN Secretariat.

From **September 9th to 11th 2019,** the IFIP Working Group 10.2 - Embedded Systems realizes its main scientific event, the **6th International Embedded Systems Symposium (IESS 2019)**, in Friedrichshafen (Germany).

Over recent years, embedded systems have gained an enormous amount of processing power and functionality. Many of the formerly external components can now be integrated into a single System-on-Chip. This tendency has resulted in both a dramatic reduction in the size and cost of embedded systems and also an increasing system added value due to the sophisticated services provided. Thus, as a unique technology, the design of embedded systems is an essential element of many innovations.

Embedded systems meet their performance goals, including real-time constraints, through a combination of special -purpose hardware and software components tailored to the system requirements. Both the development of new features and the reuse of existing intellectual property components are essential to keeping up with ever demanding customer requirements. Furthermore, design complexities are steadily growing with an increasing number of components that have to cooperate properly. Embedded system designers have to cope with multiple goals and constraints simultaneously, including timing, power, reliability, dependability, maintenance, packaging and, last but not least, price. The significance of these constraints varies depending on the application area a system is targeted for. Typical embedded applications include multimedia and gaming, automotive, avionics, computer vision, medical, Industry 4.0, communication devices, Internet-of-Thing (IoT), smart cities, smart grids, robotics, intelligent systems and others.

The goals of the International Embedded Systems Symposium are to present, exchange and discuss the state of the art, novel ideas, actual research results, and future trends in the field of embedded systems. IESS is a true inter-disciplinary conference on the design of embedded systems. Computer science and electrical engineering are the predominant academic disciplines concerned with the topics covered in IESS, but many applications also involve civil, mechanical, aerospace, and automotive engineering, as well as various medical disciplines. IESS fosters the link between academy and industry, and hence, contributors and participants from both industry and academia are encouraged to take an active part in this symposium.

Topics of interest include, but are not limited to, the following:

- Design methods and tools for embedded systems design;

- Novel and dedicated architectures for embedded systems (IoT, deep learning, etc);

- Challenges on moving architectures to the edge of clouds;

- Application specific processors: architectures, design tools and HW/SW Co-design

- Processing/Communication trade-offs at architectural level;

- Domain Specific languages

- MDE methods and languages targeting embedded systems design at different abstraction levels;

- Case studies of innovative Embedded Systems

- Reconfigurable architectures and applications

- Low power processing and communication architectures

- Embedded Systems Applications: Automotive, Avionic, Medical, Internet-of-Things (IoT), Industry 4.0, Smart Cities, Smart Grids, Computer Vision, Intelligent Systems;

- Real-time challenges for embedded systems and systems-of-systems

- Human Machine Interface techniques and methods tailored for Embedded Systems

- Security issues for embedded and real-time systems

IESS 2019 will take place at Friedrichshafen (Germany). Besides its industrial and economic strengths, Friedrichshafen is a marvelous place for both holidays and relaxation activities. It is located on the northerly banks of magnificent Lake Constance (the Bodensee) in Southern Germany. A visit to Lake Constance allows enjoying a unique panorama view of the lake and the mountains tempt. A great number of holiday activities and free-time offers are provided on and around the lake, as well as in the air: the town is the home of the Zeppelin and a dream destination for technology and aviation enthusiasts.

IESS organizer invites participants to submit original manuscripts on the topics of interest listed above. Additional information can be obtained in www.iess.org

Prof. Dr. Dr. h.c. Kurt Bauknecht

Prof Kurt Bauknecht served as IFIP President from 1995 to 1998. He co-founded the Swiss Informatics Society (SI) in 1983 and later served as its President.

He was a member of IFIP TC 6 on Communication Systems and also TC 8 on Information Systems. He brought these interests together in the establishing of WG 6.11's flagship conference on e-Commerce, e-Busi-ness, and e-Government (later changed to e-Society) (I3E) in 2001 and which is still held each year. This brought together his interest in information systems and telecommunications with their application in the real world.

Although a quintessential academic, Kurt Bauknecht's early career was in the world of data processing. After his graduation with a diploma degree in electrical engineering from ETH Zurich in 1960, he worked as a software engineer for Le Matériel Téléphonique (L.M.T.) in Paris and later for Compagnie des Machines Bull, also in Paris.

He subsequently joined the University of Zurich as a senior research associate. In 1967, he received a PhD from ETH Zurich and in 1970 he was appointed associate professor at the University of Zurich and became the head of the newly founded Institute of Electronic Data Processing. In this capacity, he also became the director of the Computing Centre of the University of Zurich. In 1973, the institute was renamed Institute of Informatics (Institut für Informatik, IfI) and he was promoted to full Professor. He continued to be the department head and director of the Computing Centre until his retirement in 2003.

Martin Glinz,full Professor Emeritus and Department Head 2007-2016, has written in tribute to Kurt Bauknecht "Under his leadership, both the Department and the Computing Center grew steadily. By the time of his retirement, IfI had developed from an institute with only one professor in 1970 to a full-fledged department with nine full or associate professors and nearly 100 people (professors, lecturers, PhD students, postdocs and administrative personnel). He laid the foundation on which his successors could build and develop IfI into the vibrant department that it is today." Martin Glinz summed up Kurt Bauknecht academic contribution as "a highly respected and influential colleague who devoted quite a lot of energy into the development and well-being of the department's faculty, staff, and resources. All who had the opportunity to work with him will remember his engagement, his leadership, and also his openness to new ideas brought up by his colleagues in the department."

Kurt Bauknecht's period as IFIP President was a time of operational change as international bodies adapted to the arrival of the internet which extended their global reach and the ability of members to interact worldwide. It also accelerated the transformation of a number of national societies into regional and global organisations. Given his research interests, he was well placed to promote the adoption of new technologies within IFIP.

However, the same technological changes gave rise in 1997/8 to one of the key challenges for IFIP during Kurt Bauknecht's Presidency when after a lengthy and agonising series of discussions General Assembly voted narrowly in 1998 that the ACM and IEEE-CS could both become Full Members of IFIP as special exceptions to the "one country, one member" rule that otherwise applied and with a designation as "US-based". This reflected their global importance to the informatics research community.

In an interview for the IFIP Newsletter after completing his term as IFIP President, Kurt Bauknecht remembered his period in office as a period of change when "IFIP established itself comfortably in Laxenburg [following the move from Geneva in 1995] and made a major transition from the classical "paper-based" organization to one that is making full use of ICT. The IFIP Telecom project was designed and implemented and the IFIP Secretariat provided leadership in demonstrating the advantages of the Internet in the process of management".

He also revived IFIP's important links with UNESCO when, with the IFIP Executive Director, he visited Paris to meet with UNESCO officials in order to activate the relations between the two organizations. He noted that the visit helped set a course of proactive IFIP involvement in UNESCO activities and led to many positive developments.

Outside his professional activities, he told the IFIP Newsletter that his hobbies were "mountaineering, skiing and golf and 3 grandchildren with unbelievable energy!"

Kurt Bauknecht died on April 23, 2019 at the age of 83.

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

IFIP 16th International Conference on Product Lifecycle Management https://www.plm-conference.org	**PLM2019**	**08/07-12/07 2019 MOSCOW, RU**	**IFIP WG5.1 / IFIP TC5**
12th International Conference on Graph Trans-formation https://sites.google.com/site/icgt2019/	**ICGT 2019**	**15/07-19/07 2019 Eindhoven, NL**	**EATCS**
33rd Annual IFIP WG 11.3 Conference on Data and Applications Security and Privacy https://dbsec2019.cse.sc.edu	**DBSec**	**15/07-17/07 2019 Charleston, US**	**IFIP WG11.3 / TC11**
21st IFIP WG 1.02 International Conference on Descriptional Complexity of Formal Systems http://im.saske.sk/dcfs2019/	**DCFS 2019**	**17/07-19/07 2019 Kosice, SK**	**Slovak Society for Compu-ter Science / VSL Soft-ware, a.s / Kosice City / Scientific Grant Agency VEGA**
IFIP WG 11.11 International Conference on Trust Management http://ifiptm2019.compute.dtu.dk/IFIPTM19/IFIPTM.html	**IFIPTM**	**17/07-19/07 2019 Copenhagen, DK**	**IFIP WG11.11 / IFIP TC11**
Asian Pacific Conference of Prognostics and Health Management 2019 http://www.phmap.cn/	**PHMAP19**	**21/07-25/07 2019 Beijing, CN**	**China Academy of Infor-mation and Communica-tions Technology / China Academy of Engineering / China Academy of Science / NSF I/UCRC Center for Intelligent Maintenance System / Korean Society for Prognostics and Health Management / China me-chanical engineering**
IFIP Summer School on Privacy and Identity Ma-nagement https://www.ifip-summerschool.org/	**IFIP-SC**	**19/08-23/08 2019 Windisch, CH**	**IFIP WG11.6 / IFIP TC11**
Annual IFIP International Conference on Net-work and Parallel Computing http://epcc.sjtu.edu.cn/npc2019	**NPC**	**22/08-24/08 2019 Hohhot, CN**	**IFIP WG10.3 / IFIP TC10**
32nd Symposium on Integrated Circuits and Sys-tems Design http://www.psi.poli.usp.br/	**SBCCI 2019**	**26/08-30/08 2019 Sao Paulo, BR**	**IEEE, ACM, Sociedade Bra-sileira de Computação (SBC) / Sociedade Brasilei-ra de Microeletrônica**
9th IFAC Conference on Manufacturing Mo-delling, Management and Control MIM 2019 http://www.mim2019.com	**MIM 2019**	**28/08-30/08 2019 Berlin, DE**	**IFIP WG5.7 / IFIP TC5**
Advances in Production Management Systems https://www.apms-conference.org	**APMS**	**01/09-05/09 2019 Austin, US**	**IFIP WG5.7 / IFIP TC5**
IFIP TC.13 International Conference on Human-Computer Interaction https://interact2019.org/	**INTERACT 2019**	**02/09-06/09 2019 Paphos, CY**	**TC13**

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

EGOV2019 – Joint conference EGOV-CeDEM-EPART 2019 http://dgsoc.org/egov-2019/	EGOV2019	02/09-05/09 2019 San Benedetto Del Tronto, IT	IFIP WG8.5 / IFIP TC8
Forum for Specification and Design Languages http://fdl-conference.org/	FDL	02/09-04/09 2019 Southampton, GB	IEEE CEDA
International Embedded Systems Symposium http://www.iess.org	IESS	09/09-11/09 2019 Friedrichshafen, DE	ZF Friedrichshafen, BHTC
12th IFIP Wireless and Mobile Networking Conference http://wmnc.dnac.org	WMNC	11/09-13/09 2019 Paris, FR	IEEE ComSoc
I3E 2019, e-Business, e-Services, e-Society http://i3e2019.com	I3E	18/09-20/09 2019 Trondheim, NO	IFIP WG6.11 / IFIP TC6
20th IFIP/Socolnet Working Conference on Virtual Enterprises http://www.pro-ve.org	PRO-VE 2019	23/09-25/09 2019 Turin, IT	SOCOLNET - Society of Collaborative Networks
Latin America Network Operations and Management Symposium http://www.lanoms.org/2019/	LANOMS	25/09-27/09 2019 Niterói, BR	Brazilian Computer Society (SBC), IEEE Communications Society (IEEE COMSOC).
2019 IFIP WG 8.11/11.13 Dewlad Roode Information Security Workshop https://ifip.byu.edu/	DRW	04/10-05/10 2019 Bossier City, LA, US	IFIP WG8.11 / IFIP TC8
27th IFIP/IEEE International Conference on Very Large Scale Integration http://vlsi-soc.pe	VLSI-SoC	06/10-09/10 2019 Cuzco, PE	IEEE CASS, IEEE CEDA, technical sponsor: ACM SIGDA
4th IFIP Conference on Information Technology in Disaster Risk Reduction http://itdrr.unwe.bg/	ITDRR-2019	09/10-10/10 2019 Kyiv, UA	IFIP TC5
TRIZ Future 2019 http://tfc19.ma/	TFC2019	09/10-11/10 2019 Marrakech, MA	IFIP WG5.4 / IFIP TC5
11th International Workshop on Resilient Networks Design and Modeling http://www.rndm.pl/2019/	RNDM 2019	14/10-16/10 2019 Nicosia, CY	IEEE Cyprus Section
The 31st IFIP International Conference on Testing Software and Systems http://ictss2019.centralesupelec.fr	IFIP-ICTSS 2019	15/10-17/10 2019 Paris, FR	CentraleSupélec
International Conference on Intelligent Agriculture http://www.iccta.cn	ICIA	18/10-21/10 2019 Beijing, CN	IFIP WG5.14 / IFIP TC5
15th International Conference on Network and Service Management http://www.cnsm-conf.org/2019/	CNSM 2019	21/10-25/10 2019 Halifax, CA	IEEE CS

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

14th OTM/IFAC/IFIP International Workshop on Enterprise Integration, Interoperability and Networking http://www.otmconferences.org/index.php/workshops/ei2n-2019	EI2N 2019	23/10-24/10 2019 Rhodos, GR	IFAC TC 5.3 / IFAC TC 3.1. / IFIP WG 5.8 / IFIP WG 5.12 A
Second IFIP International Cross-Domain Internet of Things Conference http://ifip-iotconference.org/2019	IFIP IoT 2019	31/10-01/11 2019 Tampa, Florida, US	IFIP DC on IoT
IFIP International Conference on Entertainment Computation http://cs.ucsp.edu.pe/icec2019/	ICEC	11/11-15/11 2019 Arequipa, PE	Sociedad Peruana de Computacion
8th International Conference on Performance Evaluation and Modeling in Wired and Wireless Networks https://sites.google.com/view/pemwn2019/	PEMWN 2019	26/11-28/11 2019 Paris, FR	ENSI, Tunisia / Inria, France
PoEM 2019: The Practice of Enterprise Modelling https://www.poem2019conference.lu/	PoEM2019	27/11-29/11 2019 Luxembourg, LU	IFIP WG8.1 / IFIP TC8
International Conference on Machine Learning for Networking http://www.adda-association.org/mln-2019/	MLN	03/12-05/12 2019 Paris, FR	CNAM, Télécom SudParis, ADDA
Empowering teaching for digital equity and agency http://www.tiss.edu/	ETDEA	06/01-11/01 2020 Mumbai, IN	IFIP TC3
International Symposium on Environmental Software Systems 2020 http://www.isess.net	ISESS 2020	05/02-07/02 2020 Wageningen, NL	IFIP WG5.11 / IFIP TC5
I3E 2020, e-Business, e-Services, and e-Society http://i3e2020.org	I3E	06/04-08/04 2020 Skukuza, ZA	IFIP WG6.11 / IFIP TC6
INTERNATIONAL CONFERENCE ON OPTICAL NETWORK DESIGN AND MODELLING https://ondm2020.cttc.cat/	ONDM 2020	18/05-21/05 2020 Castelldefels, ES	IEEE Communications Society (in-progress)
The 19th conference on electronic government and the 12th conference on electronic participation http://dgsoc.org/egov-2020/	EGOV	31/08-02/09 2020 Linkoping, SE	IFIP WG8.5 / IFIP TC8
14th International Human Choice and Computers Conference https://hcc14.net	HCC	09/09-11/09 2020 Tokyo, JP	IFIP tconly / IFIP TC9
28th IFIP/IEEE International Conference on Very Large Scale Integration http://vlsi-soc.pe/	VLSI-SoC	05/10-07/10 2020 Salt Lake City, US	IEEE CASS / IEEE CEDA