

**2017 the 3rd International Conference on
Communication and Information
Processing**

**2017 the 7th International Conference on
Communication and Network Security**

Tokyo, Japan

November 24-26, 2017

Conference Abstract

Venue:

Takeda Frontier Science Hall in Asano campus at the University of Tokyo

Address: University of Tokyo, Asano Campus 2-11-16, Yayoi, Bunkyo-ku, Tokyo

Instructions for Oral Workshop

Note: The following time arrangement is for reference only. In case any absence or some presentations are less than 15 minutes, please come before your session starts.

*A best presentation will be selected from each session which will be announced and awarded an excellent oral presentation certificate at the end of this session.

Devices Provided by the Conference Organizer:

- ✧ **Laptops (with MS-Office & Adobe Reader)**
- ✧ **Projectors & Screen**
- ✧ **Laser Sticks**

Materials Provided by the Presenters:

- ✧ **PowerPoint or PDF files**
- ✧ **Poster Presentation: A1 Size, Portrait Direction**

Please copy your slide file to the desktop before session starts

During your poster session, the author should stay by your poster paper to explain and discuss your paper within visiting

Duration of Each Presentation:

- ✧ **Regular Oral Session: about 15 Minutes of Presentation including Q&A.**
- ✧ **Keynote Speech: 45 Minutes of Presentation including Q&A.**
- ✧ **Invited speech: 25 Minutes of Presentation including Q&A.**

About Dress Code

- ✧ **All participants are required to dress formally. Casual wear is unacceptable.**
- ✧ **National formal dress is acceptable.**



Prof. Herwig Unger
University of Hagen, Germany

Prof. Dr.-Ing. habil. Herwig Unger got his PhD with a work on Petri Net transformation in 1994 from the Technical University of Ilmenau and his habilitation with a work on large distributed systems from the University of Rostock in 2000. Since 2006, he is a full professor at the FernUniversit?t in Hagen and the head of the Chair of Communication Networks. His research interests are in self-organization, adaptive and learning systems, Internet algorithms and simulation systems.

Speech Title: The future of Internet Search

Abstract: The use of giant search engines with their -- although not covering even half of the WWW -- giant databases as offered by Google or Microsoft (Bing) is currently the only possibility to find content in the Internet. This is because today's webpages are usually neither stored nor linked with any relation to the information (keywords) contained or any (hierarchical) ontologies applicable. Apart from the many deficiencies these huge data collections have due to their very nature, the representation of search results in form of simple text lists is an anachronism disregarding the technical possibilities available, but also user requirements or operation modes of classical librarians.

After analysing the current situation in its first part, this talk will present existing remedies for the above mentioned problems, methods under development in research institutions, and emerging ideas for the organisation of next-generation networks.

First, approaches based on locally working agents will be considered, which may access and analyse a plentitude of personal data and behavioural patterns of users without divulging them to external spying organisations. Furthermore, these approaches allow for flexible, user- and session-oriented (search process) presentation of results as well as for processing user feedback. In the future, more powerful search engines will be based on decentralised platforms in connection with intelligent and adaptive structures for linking documents. Using the approach of the "WebLibrarian", which is just being implemented by the author, examples for the algorithms and methods needed will be provided, and it will be shown that only a (local) combination of information about user, network and content may lead to the desired results.

Finally, it will be worked out that brain-like structures as well as methods derived from natural analoga will open the way to future progress in Internet data organisation and retrieval.



Prof. Masahiro Fujita
The University of Tokyo, Japan

Masahiro Fujita received his Ph.D. in Information Engineering from the University of Tokyo in 1985 on his work on model checking of hardware designs by using logic programming languages. In 1985, he joined Fujitsu as a researcher and started to work on hardware automatic synthesis as well as formal verification methods and tools, including enhancements of BDD/SATbased techniques. From 1993 to 2000, he was director at Fujitsu Laboratories of America and headed a hardware formal verification group developing a formal verifier for real-life designs having more than several million gates. The developed tool has been used in production internally at Fujitsu and externally as well. Since March 2000, he has been a professor at VLSI Design and Education Center of the University of Tokyo. He has done innovative work in the areas of hardware verification, synthesis, testing, and software verification-mostly targeting embedded software and web-based programs. He has been involved in a Japanese governmental research project for dependable system designs and has developed a formal verifier for C programs that could be used for both hardware and embedded software designs. The tool is now under evaluation jointly with industry under governmental support. He has authored and co-authored 10 books, and has more than 200 publications. He has been involved as program and steering committee member in many prestigious conferences on CAD, VLSI designs, software engineering, and more. His current research interests include synthesis and verification in SoC (System on Chip), hardware/software co-designs targeting embedded systems, digital/analog co-designs, and formal analysis, verification, and synthesis of web-based programs and embedded programs.



Prof. Jalel Ben-Othman
University of Paris 13, France

Prof. Ben-Othman received his B.Sc. and M.Sc. degrees both in Computer Science from the University of Pierre et Marie Curie, (Paris 6) France in 1992, and 1994 respectively. He received his PhD degree from the University of Versailles, France, in 1998. He was an Assistant Professor at the University of Orsay (Paris 11) and University of Pierre et Marie Curie (Paris 6), in 1998 and 1999 respectively. He was an Associate Professor at the University of Versailles from 2000 to 2011. He is currently full professor at the University of Paris 13 since 2011. Dr. Ben-Othman's research interests are in the area of wireless ad hoc and sensor networks, Broadband Wireless Networks, multi-services bandwidth management in WLAN (IEEE 802.11), WMAN (IEEE 802.16), WWAN (LTE), VANETS, Sensor and Ad Hoc Networks, security in wireless networks in general and wireless sensor ad hoc networks and vehicular ad hoc Networks. His work appears in highly respected international journals and conferences, including, IEEE ICC, Globecom, LCN, MSWIM, VTC, PIMRC etc. He has supervised and co-supervised several graduate students in these areas. He is widely known for his work on wireless ad hoc and sensor Networks, in particular, security. He gave several talks on these topics, as Keynote in conferences Road Transportation System Strategy and Standardization (Korea), WCCCS'13, NSERC DIVA Distinguished Lecture Series (Canada), P2MNET'10, PEDISWESA'09, and as invited talks in GIST (Korea), Seoul National University, KRRI (Korea), USTHB (Algeria), Fes University (Marocco), Hanoi Science and Technology University (Vietnam), Reims (France), Martinique (France), University of Ottawa (Canada), INRS (Canada), Gliwice (Pologne)..... He is an editorial board member of Wiley Wireless Communications and Mobile Computing (WCMC), Wiley Security and Communication Networks (SCN), Inderscience Int. J. of Satellite Communications Policy and Management, IEEE comsoc Journal of Communications and Networks (JCN) and International Journal On Advances in Networks and Services IJANS. He is also an Associate Editor of Wiley International Journal of Communication Systems (IJCS). He is also editor of Elsevier ICTexpress. He has served as a member of Technical Committees of more than 80 international IEEE/ACM conferences and workshops including ICC, Globecom, MSWIM, LCN. He is a member of IEEE and ACM. He has served as General co-chair of international conference on wireless networks and mobile communications (WINCOM'15), and program chair of IEEE New technologies mobility and security (NTMS'15). He has served as TPC Co-Chair for IEEE Globecom Ad hoc and Sensor and and Mesh Networking (Globecom, 2011, 2014). He will serve as TPC Co-Chair for IEEE Globecom Wireless and Mobile Networks symposium (Globecom, 2016), and as a TPC Co-Chair of IEEE Globecom Wireless Communications Symposium (Globecom 2010). He has served as TPC Co-Chair IEEE

International Conference on Communications Ad hoc and Sensor and and Mesh Networking (ICC 2012, ICC 2014). He is serving as TPC Co-Chair IEEE International Conference on Communications Wireless and Mobile Networks symposium (ICC 2016). He also has served as TPC Co-Chair Wireless Networking Symposium of The IEEE International Wireless Communications and Mobile Computing Conference (IWCMC 2011, 2012, 2013, 2014, 2015, 2016), ACM International Symposium on QoS and Security for Wireless and Mobile Networks (Q2SWinet 2010, 2011, 2012), and other conferences as for ICNC, WSCP, CNIT. He has served as Workshop chair for 9th international Workshop on Wireless local Networks (WLN09) and 10th international Workshop on Wireless local Networks (WLN10). He served as a publicity chair of several conferences such as the 12th ACM International Conference on Modeling, Analysis and Simulation of Wireless and Mobile Systems (MSWIM 09), IEEE International Symposium on a World of Wireless Mobile and Multimedia Networks (WOWMOM 2010), 25th Biennial Symposium on Communications. He has also served as Tutorial chair for Modeling, Analysis and Simulation of Computer and Telecommunication Systems (MASCOTS 2014). He served as Local Arrangement Chair for the 13th IEEE International Symposium on Computer Communication (ISCC 09). As IEEE Comsoc Member, he has actively participated to the activities. He was the secretary and he is currently Vice chair of the IEEE Ad Hoc and sensor networks technical committee since january 2012. He is IEEE Comsoc distinguished lecturer since January 2015. He is member of the IEEE comsoc technical service board since January 2016. He is an active member of IEEE Communication software, CIS-TC, and WTC..



Prof. Gang Feng
UESTC, China

Dr. Gang Feng (M'01, SM'06) received his BEng. and MEng degrees in Electronic Engineering from the University of Electronic Science and Technology of China (UESTC), in 1986 and 1989, respectively, and the Ph.D. degrees in Information Engineering from The Chinese University of Hong Kong in 1998. He joined the School of Electric and Electronic Engineering, Nanyang Technological University in December 2000 as an assistant professor and was promoted as an associate professor in October 2005. At present he is a professor with the National Laboratory of Communications, University of Electronic Science and Technology of China. Dr. Feng has extensive research experience and has published widely in computer networking and wireless networking research. His research interests include resource management in wireless networks, wireless network coding, sensor networks, etc. Dr. Feng is a senior member of IEEE..

**Prof. Olga N. Korableva,
ITMO University, Russia**

TBA

Day 1, Friday, 24 November, 2017 Arrival Registration	
09:00am-17:30pm	Sign in and Collect Conference Materials
14: 30pm-15: 30pm	Lab Visiting-VLSI Design and Education Center (Takeda Frontier Science Hall in Asano campus at the University of Tokyo)

Day 2, Saturday, 25 November, 2017 Conference Speeches and Authors Presentations Venue: Takeda Hall-the fifth floor	
	Keynote Speech 1 Prof. Herwig Unger University of Hagen, Germany
	Keynote Speech 2 Prof. Masahiro Fujita The University of Tokyo, Japan
Group Photo & Coffee Break	
	Keynote Speech 3 Prof. Jalel Ben-Othman University of Paris 13, France
	Keynote Speech 4 Prof. Gang Feng UESTC, China
Lunch	

	Invited Speech 1	
	Prof. Olga N. Korableva, ITMO University, Russia	
Authors Presentations		
Session 1	Session 2	
Coffee Break		
Session 3	Session 4	
Dinner		

Day 3, Sunday, 26 November, 2017 One Day Tour
Tour in Tokyo (Pending)

Conference Venue



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