Next Generation Networking Symposium

Symposium Co-Chairs
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The 2013 IEEE International Conference on Communications (ICC) will be held in the vibrant city of Budapest, Hungary from 9 – 13 June 2013. This flagship conference of IEEE Communications Society aims at addressing an essential theme on “Bridging the Broadband Divide.” The conference will feature a comprehensive technical program including several Symposia and a number of Tutorials and Workshops. IEEE ICC 2013 will also include an attractive expo program including keynote speakers, various Business, Technology and Industry forum, and vendor exhibits. We invite you to submit your original technical papers, industry forum, workshop, and tutorial proposals to this event. Accepted and presented papers will be published in the IEEE ICC 2013 Conference Proceedings and in IEEE Xplore®. Full details of submission procedures are available at http://www.ieee-icc.org/2013.

Scope and Topics of Interest

The Next Generation Networking Symposium will focus on some of the important trends and evolutions in next generation Internet architectures and services. Modern Internet networking infrastructures embody a wide range of technologies-wireless and wired-and support a diverse spectrum of user services. However, as overall demands continue to grow, there is a continual need to develop improved “next-generation” architecture designs and services. In particular, some of the key challenges relate to multi-technology integration, future Internet designs, Internet security and privacy, routing scalability, Content Delivery Networks, impact of the rise of Cloud computing on networks, data center networking, and energy consumption (green networks). Furthermore, the increasing prevalence of wireless and mobile user devices is creating new challenges relative to mobility management. New paradigms such as software defined networking and network virtualization will influence next-generation network designs.

To ensure complete coverage of the advances in next generation Internet architectures and services, the Next Generation Networking Symposium presents original contributions in, but not limited to, the following topical areas:

- Internet architecture and design
- Switch and router architectures, performance, control, buffer management, packet scheduling
- High speed packet forwarding, packet classification
- Traffic identification and application-oriented networks
• Greening Networks and green computing
• Data centers and cloud computing
• Packet processor and traffic manager chip design
• Network and service survivability, network resilience
• Next-generation access networks
• Internet signalling and service enabling protocols, including SIP, NSIS, HTTP, RTSP/RTP, etc
• Network virtualization, virtual private networks (VPN), software defined networking and services
• Network Federation
• Mobile/wireless Internet and services, mobility management/addressing
• Converged networks and applications, NGN telecom networks
• Multi-layer and multi-domain networks
• Wireless-wireline internetworking, optical-wireless integration
• Internet applications including interactive media, voice, video, gaming, immersion
• Overlay and peer-to-peer networking and applications
• Service pricing model, Internet economics, accounting/billing, growth modelling
• Content-based networking, caching, distribution, load balancing, resiliency/redundancy
• Wireless content distribution, self-organization
• Traffic engineering, flow control, resource management, congestion control
• Routing: unicast, multicast, anycast, etc (wireless, wireline)
• Multihoming, network planning and optimization
• VoIP protocols and services, packet video
• Network management methodologies and control plane design
• Mapping of QoE to QoS
• Mechanisms for self-organisation and autonomous networking
• Traffic measurement, management, analysis, modelling, and visualization
• Emerging and future Internet technologies
• Software Define Networking paradigms, architectures, devices, etc

Submission Guidelines

Prospective authors are invited to submit original technical papers by the deadline 16 September 2012 for publication in the IEEE ICC 2013 Conference Proceedings and for oral or poster presentation(s).

All submissions should be written in English with a maximum paper length of Five (5) printed pages (10-point font) including figures without incurring additional page charges (maximum 1 additional page with over length page charge if accepted).


Only PDF files will be accepted for the review process and all submissions must be done through EDAS at http://edas.info/
Joel Rodrigues is the editor-in-chief of the International Journal on E-Health and Medical Communications, the editor-in-chief of the Recent Patents on Telecommunications, and editorial board member of several journals, including IEEE Communications Magazine. He has been general chair and TPC Chair of many international conferences, including IEEE ICC 2012, IEEE ICC 2011, IEEE GLOBECOM 2010. He is the General Chair of the IEEE Healthcom 2013 (Lisbon, Portugal), a member of many international TPCs and participated in several international conferences organization. He has authored or coauthored over 200 papers in refereed international journals and conferences, a book, and 2 patents. He had been awarded the Outstanding Leadership Award of IEEE GL Short biography of co-chairs

Joel Rodrigues is a professor at the Department of Informatics of the University of Beira Interior, Covilhã, Portugal, and researcher at the Instituto de Telecomunicações, Portugal. He is the leader of NetGNA Research Group (http://netgna.it.ubi.pt), the Vice-chair of the IEEE ComSoc Technical Committee on Communications Software, the Vice-Chair of the IEEE ComSoc Technical Committee on eHealth, and Member Representative of the IEEE Communications Society on the IEEE Biometrics Council. OBEcom 2010 as CSSMA Symposium Co-Chair and several best papers awards. Prof. Rodrigues is a licensed professional engineer (as senior member), member of the Internet Society, an IARIA fellow, and a senior member of ACM and IEEE.

Wojciech Kabacinski graduated in Telecommunications in 1983 (with honour) from Poznan University of Technology (PUT). In 1988 he received a PhD degree (his thesis was awarded by the Ministry of National Education), in 1999 he received the Doctor Habilitus degree, both form PUT, and in 2006 he became a full professor. Since 1983 he has been working at the Poznan University of Technology, where he currently is a Full Professor. He worked also as a consultant for telecom industry, and as professor at the College of Communications and Management.

Wojciech Kabacinski is the author of six books, over 150 papers and has 10 patents. His main research interests include: digital switching systems, photonic switching networks and systems, switching network architectures. He served as a reviewer for IEEE Transactions on Communications, IEEE Communications Magazine, IEEE Journal on Selected Areas in Communications, IEEE/ACM Transactions on Networking, IEEE Journal of Lightwave Technology, IEEE Photonics Technology Letter, and Performance Evaluations. He was also one of the Guest Editors of Feature Topic in IEEE Communications Magazine concerning Clos switching networks. He is the associated technical editor of IEEE Communications Magazine and the editor of IEEE Communications Survey and Tutorials. He was or currently is a member of technical program committees of international and national conferences and symposia including IEEE ICC and IEEE Globecom. He was also the Technical Program Vice-Chair of 2005 Workshop on High Performance Switching and Routing (HPSR 2005), and the General Chair of HPSR 2006. Professor Kabacinski is the senior member of IEEE Communications Society and Association of Polish Electrical Engineers (SEP). He served as the secretary, the vice-chair, and the chair of Communications Switching and Routing Technical Committee of Communications Society. He was also the chair of IEEE Polish Section Chapter Communications Poznan.

Malathi Veeraraghavan is a Professor in the Charles L. Brown Department of Electrical & Computer Engineering at the University of Virginia (UVA). Dr. Veeraraghavan received her BTech degree from Indian Institute of Technology (Madras) in 1984, and MS and PhD degrees from Duke University in 1985 and 1988, respectively. After a ten-year career at Bell Laboratories, she served on the faculty at Polytechnic University, Brooklyn, New York from 1999-2002, where she won the Jacobs award for excellence in education in 2002. She served as Director of the Computer Engineering Program at UVA from 2003-2006. Her current research work on optical networks is supported by NSF and DOE, and on vehicular networks by the US-DOT. She holds twenty-nine patents, has over 90 publications, and has received five Best-paper awards. She served as the Technical Program Committee Chair for IEEE ICC 2002, and Associate Editor for the IEEE/ACM Transactions on Networking. She was General Chair for IEEE Computer Communications Workshop in 2000, and served as an Area Editor for IEEE Communication Surveys. She served as Editor of IEEE ComSoc e-News and as an Associate Editor of the IEEE Transactions on Reliability from 1992-1994.