Call for Papers for
Green Communications Systems and Networks Symposium

Symposium Co-Chairs

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Submissions must be done through EDAS at http://edas.info/N20937

Scope and Motivation

In recognition of the dramatic growth in R&D related to green information communication technologies, ICC has decided to offer a symposium completely devoted to Green Communications Systems and Networks starting in 2016. This symposium will be a venue for research outcomes on reducing carbon emissions and thereby reducing operational costs in communication systems and networks, as well as on using communication and computing technologies to enable solutions such as smart grid, green buildings, green services, green cloud computing, and green data centers for a sustainable world.

The Green Communications Systems and Networks Symposium aims to consolidate and disseminate the latest developments and advances in the emerging research areas of energy-efficient communications, and invites participation from both academic and industry researchers. Authors are invited to submit papers presenting novel technical research studies as well as broader position papers.

Main Topics of Interest

Topics of Interest Include (but are not limited to):

- Theory, modelling, analysis, and performance of green communication and computing systems
- Architectures, algorithms, protocols and designs for green communication systems and networks
- Green communication in 5G systems
- Green wired/wireless transmission technologies and physical layer approaches
- Green optical communications, switching and networking
- Green wireless cellular networks
- Cross-layer design and optimization for green communications and networking
- Energy-efficient routers and switches
- Green cloud computing communications protocols
- Novel network concepts and architectures lowering the overall footprint of ICT
- Self-organizing green wireless networks
- Non-energy based green issues and approaches
- Green traffic shaping and policy implementation
- Cognitive principles to reduce energy and/or resource consumption in wireline/ wireless networks
- Power-efficient cooling and air-conditioning systems for communications and computing
- Low cost, energy-efficient antenna and RF designs
- Green management of communication networks and data centers
- Context-based green management & green awareness
- Economy and pricing for green communication and services
- Green network monitoring and measurements
- Green sustainable storage and cloud computing
- Measurement and profiling of energy consumption
- Scheduling for green computing and communications
- Power consumption trends and reduction in communications
- Security in green communication networks

- Privacy and societal impacts
- Standardization, policy and regulation for green communications and computing
- Mitigation of electromagnetic pollution
- Experimental test-beds and results for green communications and computing
- Communication technologies for green transport and logistics efficiency
- Communication technologies for green industrial processes
- Communication technologies for green buildings
- Energy harvesting for green computing and communications
- Green techniques for sensor and actuator networks
- Green techniques for Internet of Things
- Green techniques for smart highways and vehicular networks
- Advanced metering infrastructure and smart meter technologies
- Field trials and deployment experiences for green communications and computing

Biographies of Co-Chairs

Sumei SUN obtained the B.Sc.(Honours) Degree from Peking University, China, the M.Eng Degree from Nanyang Technological University, and Ph.D Degree from National University of Singapore. She's been with Institute for Infocomm Research (formerly Centre for Wireless Communications) since 1995. She was the Communication Systems and Signal Processing (CSSP) Technology Group Leader during 2000 to 2002, Modem Technology Laboratory Head during 2003 to 2006. Since 2007, she has been the Head of Modulation & Coding Department, developing physical layer-related solutions for next-generation communication systems. Dr. Sun has published actively in IEEE journals and conference, and she was co-recipient of IEEE PIMRC'2005 Best Paper Award. She's inventor and co-inventor of over twenty patents and patent applications, many of which have been licensed to industry. For the achievement in technology invention and industry contribution, she and her team was honored with the Scientist-Entrepreneur Award from the Agency for Science, Technology, and Research (A*STAR) in 2008. Dr. Sun has served as Track Co-Chair of Mobile Networks, Applications, Services, IEEE Vehicular Technology Conference (VTC) 2014 Spring, Track Co-Chair of Transmission Technologies, IEEE VTC 2012 Spring, TPC Vice Chair of 14th (2014) and TPC Chair of 12th (2010) IEEE International Conference on Communications, General Co-Chair of 7th (2010) and 8th (2011) IEEE Vehicular Technology Society Asia Pacific Wireless Communications Symposium (APWCS), and Track Chair of Signal Processing for Communications, Asia-Pacific Signal and Information Processing Association Annual Summit and Conference 2010 (APSIPA ASC 2010). She has also served as TPC members for many IEEE conferences for many years, for example, ICC, Globecom, WCNC, PIMRC, etc. She is an Editor of IEEE Transactions on Vehicular Technology, and of IEEE Wireless Communication Letters. Her research interests lie in general digital communication systems and specifically in signal processing, coding and modulation techniques for communication systems. Her recent research focus is on energy efficient wireless communication systems, transmission technologies for 5G, joint source-channel processing for wireless multimedia communications, and wireless transceiver design.

Anura Jayasumana is a Professor of Electrical and Computer Engineering at Colorado State University, USA, where he also holds a joint appointment in Computer Science. He is the director of the Computer Networking Research Laboratory at CSU, with research spanning collaborative P2P systems, high-speed radar networks, wireless sensor networking, Internet of Things, distributed pattern detection on networks, and network measurements. His research expertise also includes optical networks and protocols for high-speed networks. He has been the keynote speaker in a number of conferences, and also presented numerous tutorials on topics related to networking and communications. He is also an IEEE Communications Society Distinguished Lecturer. He received B.Sc. degree with First Class Honors from the University of Moratuwa, Sri Lanka, and M.S. and Ph.D. degrees in Electrical Engineering from Michigan State University. Prof. Jayasumana has supervised 20+ Ph.D. and 50+ M.S. students, holds two patents, and is the co-author of a book and ~300 refereed papers. He is the recipient of the Outstanding Faculty Award from the Mountain States Council of American Electronics Association. He has served extensively as a consultant to industry ranging from startups to Fortune 100 companies.