Call for papers
Green Computing, Networking, and Communications Symposium (GCNC), ICNC 2016

Kauai, Hawaii, Feb. 15-18, 2016
http://www.conf-icnc.org/

Symposium Co-chairs

Lin X. Cai, Illinois Institute of Technology, USA, Email: lincai@iit.edu

Lingjie Duan, Singapore University of Technology and Design, Singapore, Email: lingjie_duan@sutd.edu.sg

Chandra Murthy, Indian Institute of Science, India, Email: cmurthy@ece.iisc.ernet.in

Scope

Green computing has been one of the important topics of research in recent years due to its potential economic and environmental impact. Recent studies have shown that ICT and computing resources account for 2% -- 10% of the world's power consumption, and is quickly growing due to the ever-increasing proliferation of electronic devices.

To reduce the carbon-footprint and improve the environmental sustainability, novel paradigms, methods, techniques, and systems are needed to develop green computing and communication technologies, with focus on high-energy efficiency, lowering the dependence on energy sources that lead to greenhouse gas emissions, better re-use of resources and materials, and the use of renewable energy resources.

The ICNC Green Computing, Networking, and Communications Symposium aims at bringing together researchers and visionaries from academia, research laboratories, and industries working towards the ultimate goal of green ICT. To this end, this symposium solicits original theoretical, experimental, and design approaches that can cope with this paradigm shift towards green computing. The symposium also solicits the application of computing, communications, and networking technologies towards the development of sustainable energy systems that may include modernization of the electric power grid and the integration of distributed energy resources. Topics of particular interest include, but are not limited to the following.

- Green computing models, simulations, designs, and paradigms
- Green ICT operation with renewable energy
- Green materials and devices
- Green high-performance computing and applications
- Cross-layer optimization of green networking infrastructures
- Energy-aware software-defined network
- Energy-aware algorithms and protocols
- Energy harvesting based communications, computing, and control
- Ambient energy harvesting, models, prediction, storage, and recycling
- Energy-efficient networking and computing infrastructures
- Energy-efficient multimedia systems
- Energy-efficient data center and cloud technologies
- Life-cycle analysis of communication and computing equipment, especially with energy harvesting
- Climate and ecosystem monitoring
- Integration of distributed energy resources and EVs utilizing ICT
- Design, analysis, and realization of smart grid
- Applications of energy efficient systems such as green Body Area Networks
- Implementations, test-beds and experimental results for green communications and computing
- Quality-of-service provisioning in green ICT

Submission Guidelines

Please follow the author instructions at http://www.conf-icnc.org/author.htm

Direct paper submission weblink of this symposium can be found at http://www.conf-icnc.org/cfp.htm

Paper Submission: 5 July 2015
Acceptance Notification: 20 Sept. 2015
Camera-ready Paper: 20 Oct. 2015
Conference: 15-18 February 2016

Short biography of co-chairs

Dr. Lin X. Cai received the M.A.Sc. and Ph.D. degrees in Electrical and Computer Engineering from the University of Waterloo, Waterloo, Canada, in 2005 and 2010, respectively. She was a postdoctoral research fellow in Electrical Engineering department at Princeton University in 2011. She has been working as a senior engineer in Huawei US Wireless R&D center before she joined the Department of Electrical and Computer Engineering, Illinois Institute of Technology, Chicago, Illinois, USA, as an Assistant Professor in August 2014. Her research interests include green communication and networking, broadband multimedia services, radio resource and mobility management, and cognitive radio networks. She received a Postdoctoral Fellowship Award from the Natural Sciences and Engineering Research Council of Canada (NSERC) in 2010, and a Best Paper Award from the IEEE Globecom 2011. She has been serving on the technical program committees of major computer communications and networking conferences including IEEE Globecom, WCNC, ICC, and PIMRC. She is an Associated Editor for IEEE Network Magazine, and a co-chair for the cognitive radio network symposium of IEEE ICC 2014.

Dr. Lingjie Duan received the Ph.D. degree from The Chinese University of Hong Kong in 2012. He is an Assistant Professor of Engineering Systems and Design Pillar, Singapore University of Technology and Design. During 2011, he was a Visiting Scholar in the Department of EECS at the University of California at Berkeley. His research interests include network economics, game theory, network optimization, energy harvesting, and green communications. He has published a book with Springer Press and many leading journal and conference papers in the related areas. He is the awardee of the 2011 Global Scholarship for Research Excellence at CUHK, and the 2014 Hong Kong Young Scientist Award (Finalist in Engineering Science track). Besides, he serves as the Program Co-Chair of IEEE INFOCOM'2014 GCCCN Workshop, ICCS'2014 special session on Economic Theory and Communication Networks, and the Wireless Communication Systems Symposium of IEEE ICCC 2015. He also serves as a technical program committee (TPC) member of many leading conferences in communications and networking.

Dr. Chandra R. Murthy received the B.Tech. degree in Electrical Engineering from the Indian Institute of Technology, Madras in 1998, the M.S. and Ph.D. degrees in Electrical and Computer Engineering from Purdue University and the University of California, San Diego, in 2000 and 2006, respectively. From 2000 to 2002, he was at Qualcomm Inc., where he worked on WCDMA baseband transceiver design and 802.11b baseband receivers. From Aug. 2006 to Aug. 2007, he worked as a staff engineer at Beceem Communications Inc. on advanced receiver architectures for the 802.16e Mobile WiMAX standard. In Sept. 2007, he joined as a faculty at the Department of Electrical Communication Engineering at the Indian Institute of Science, where he is currently working as an Associate Professor. His research interests are in the areas of Cognitive Radio, Energy Harvesting Wireless Sensors, MIMO systems with channel-state feedback and sparse signal recovery. He won the best paper award in the National Conference on Communications, held at IIT Kanpur, India, in Feb. 2014. He has been TPC Co-Chair on the first and second IEEE Workshops on Energy Harvesting Communications held in Conjunction with IEEE ICC 2012 and 2013. He has also been a TPC Co-Chair for SPCOM 2014 held at the Indian Institute of Science in July 2014. He is currently serving as an associate editor for the IEEE Signal Processing Letters and as an elected member of the IEEE SPCOM Technical Committee for the years~2014-16. He is a senior member of the IEEE.