

Call for papers
Green Computing, Networking, and Communications Symposium
(GCNC), ICNC 2014

Honolulu, Hawaii, USA, February 3-6, 2014

<http://www.conf-icnc.org/2014>

Symposium Co-chairs

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Scope

Green computing has recently become a major research topic due to its various economical and environmental impacts. Recent studies have shown that the amount of greenhouse gas emissions produced by computers, communication systems, and other information and communication technologies (ICT) alone is almost equivalent to that of the entire aviation industry. Moreover, according to many studies, ICT and computing resources account for 2% to 10% of the world power consumption, due to the ever increasing diffusion of electronic devices.

To reduce these environmental problems and maintain a sustainable environment, novel paradigms, methods, techniques, tools, and systems are needed so as to develop green computing and communication technologies with high energy efficiency, low greenhouse gas emissions, and better re-use of resources and material.

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
- Realization of Smart Grids by the application of ICT
- Design and analysis of the smart power grid
- Energy-aware computing and communications
- Energy-efficient networking and computing infrastructures
- Energy-efficient multimedia systems
- Energy-efficient cloud computing
- Energy-aware resource allocation and scheduling mechanisms
- Green materials and devices designs
- Usage of renewable energy for green ICT operation
- Cross-layer optimization of green networking infrastructures
- Life-cycle analysis of computing equipment
- Energy harvesting, storage, and recycling Climate and ecosystem monitoring
- Energy-efficient data center and cloud technologies
- Green high-performance computing and applications
- Integration of Distributed Energy Resources and EVs utilizing ICT

Submission Guidelines

Please follow the author instructions at <http://www.conf-icnc.org/2014/author.htm>

Direct paper submission weblink of this symposium can be found at <http://www.conf-icnc.org/2014/cfp.htm>

Short biography of co-chairs

Dr. Walid Saad

Dr. Saad received his Ph.D degree from the University of Oslo in 2010. He is currently an Assistant Professor at the Electrical and Computer Engineering Department at the University of Miami. In the past, he has been a research scholar at various institutions such as the University of Illinois at Urbana-Champaign and Princeton University. His research interests include applications of game theory in wireless networks, small cell networks, cognitive radio, wireless security, wireless systems, and smart grids. He was the author/co-author of the papers that received the Best Paper Award at the 7th International Symposium on Modeling and Optimization in Mobile, Ad Hoc and Wireless Networks (WiOpt), in June 2009, at the 5th International Conference on Internet Monitoring and Protection (ICIMP) in May 2010, and at the IEEE WCNC conference in April 2012. Dr. Saad is a recipient of the NSF CAREER Award in 2013.

Dr. Nabil J. Sarhan

Dr. Sarhan received the Ph.D. and M.S. degrees in Computer Science and Engineering at the Pennsylvania State University and the B.S. degree in Electrical Engineering at Jordan University of Science and Technology. Dr. Sarhan joined Wayne State University in 2003, where he is currently an Associate Professor of Electrical and Computer Engineering and the Director of Wayne State Multimedia Computing and Networking Research Laboratory. His main research areas include video streaming and communication, computer and sensor networks, automated video surveillance, multimedia systems design, energy-efficient systems, and cross-layer optimization. Dr. Sarhan is the Chair of the Interest Group on Media Streaming of the IEEE Multimedia Communication Technical Committee. He is an Associate Editor of the IEEE Transactions on Circuits and Systems for Video Technology. Dr. Sarhan has been involved in the organization of numerous international conferences in various capacities, including chair, publicity chair, track chair, and technical program committee member. He served as the Co-Director of the IEEE Multimedia Communication Technical Committee Review Board. Dr. Sarhan is the recipient of the 2008 Outstanding Professional of the Year Award from the IEEE Southeastern Michigan Section and the 2009 President's Award for Excellence in Teaching from Wayne State University.