



Bridging the Broadband Divide  
9-13 June • Budapest, Hungary



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### Ad-hoc and Sensor 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

With the proliferation of wireless networking nodes and Internet applications into a wider class of customers, the demand for supporting these applications in the absence of the wired Internet access is increasing. The demand promotes the development of wireless networks; representative examples include ad hoc, sensor and mesh networks. The widespread of sensor-based systems triggers networking devices with information process and computing capabilities. This kind of system is normally termed as the cyber-physical system (CPS), which is a system featuring a tight combination of, and coordination between, the system’s computational and physical elements. The Ad-hoc and Sensor Networking Symposium will focus on state-of-the-art solutions related to ad hoc, sensor, mesh networks and cyber-physical system.

To ensure complete coverage of the advances in areas mentioned above, the Ad-hoc and Sensor Networking Symposium presents original contributions in, but not limited to, the following topical topics:

- Applications and Evolutions of Ad Hoc, Sensor, and Mesh Networks
- Autonomic Networking
- Wireless, Ad Hoc, and Sensor Devices
- Physical Layer Design of Ad Hoc, Sensor and Mesh Networks
- Frequency and Channel Allocation Algorithms

- Topology Control and Management
- Algorithms and Modeling for Localization, Target Tracking, and Mobility Management
- Architectures of Wireless Communication and Mobile Computing in Ad Hoc, Sensor and Mesh Networks
- MAC Protocols for Ad Hoc, Sensor, and Mesh Networks
- QoS Provisioning in Medium Access Control and Routing for Ad Hoc and Mesh Networks
- Analytical, Mobility, and Validation Models for Ad Hoc, Sensor, and Mesh Networks
- Performance Evaluation and Modeling of Mobile, Ad Hoc, Sensor, and Mesh Networks
- Integrated Simulation and Measurement based Evaluation of Ad Hoc and Sensor Systems
- New Simulation Languages, Methodologies, and Tools for Wireless Systems in Ad Hoc, Sensor and Mesh Networks
- Analysis of Correctness and Efficiency of Protocols
- Data Management, Data Aggregation, Data Dissemination, and Query Processing
- Distributed Algorithms in Ad Hoc, Sensor and Mesh Networks
- Pricing Modeling and Solutions
- Pervasive and Wearable Computing
- Co-existence Issues of Hybrid Networks
- Energy Saving and Power Control Protocols for Ad Hoc, Sensor, and Mesh Networks
- Resource Management Algorithms in Mobile, wireless Ad Hoc and Mesh Networks
- Synchronization and Scheduling Issues in Mobile and Ad Hoc Networks
- Service Discovery for Wireless Ad Hoc, Mesh, and Sensor Networks
- Cross-layer Design and Interactions in Ad Hoc, Sensor and Mesh Networks
- Mobile Service and QoS Management for Ad Hoc and Sensor Networks
- Survivability and Reliability Evaluation and Modeling for Ad Hoc, Sensor, and Mesh Networks
- Ubiquitous and Mobile Access for Wireless Mesh Networks
- Security and Privacy Issues in Wireless Ad Hoc, Mesh, and Sensor Networks
- Integrated design methods for CPS
- HW/SW co-design for CPS
- Simulation and emulation of CPS
- Integrated tool chains for CPS
- Scalable CPS Architectures
- Composability of software, hardware and physical components
- Analysis of cyber-physical systems with multiple temporal and spatial scales
- High-confidence and security in CPS

## 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).

**Standard IEEE Transactions templates for Microsoft Word or LaTeX formats found at**  
<http://www.ieee.org/portal/pages/pubs/transactions/stylesheets.html>

**Alternatively you can follow the sample instructions in template.pdf at**  
<http://www.comsoc.org/confs/globecom/2008/downloads/template.pdf>

**Only PDF files will be accepted for the review process and all submissions must be done through EDAS at**  
<http://edas.info/>

Short biography of co-chairs

**Dr. Xinbing Wang** received the B.S. degree in automation (with honors) from Shanghai Jiao Tong University, Shanghai, China, in 1998, the M.S. degree in computer science and technology from Tsinghua University, Beijing, China, in 2001, and the Ph.D. degree with a major in electrical and computer engineering and minor in mathematics from North Carolina State University, Raleigh, in 2006. Currently, he is a faculty member with the Department of Electronic Engineering, Shanghai Jiao Tong University. His research interests including scaling law

of wireless networks and cognitive radio networks. Dr. Wang has been an Associate Editor of the IEEE TRANSACTIONS ON MOBILE COMPUTING and a member of the Technical Program Committees of several conferences including ACM MobiCom 2012, ACM MobiHoc 2012, and IEEE INFOCOM 2009–2012.

**Dr. Guoliang Xue** is a Professor of Computer Science and Engineering at Arizona State University (ASU). Before joining ASU as a tenured Associate Professor in 2001, he had worked at The University of Vermont as an Assistant/Associate Professor in the Department of Computer Science and Electrical Engineering (1993-2001), The University of Minnesota as a Postdoctoral Fellow in the Army High Performance Computing Research Center (1991-93), and Qufu Normal University as a Lecturer in the Institute of Operations Research (1984-87). He was promoted to the rank of Full Professor in 2005. He earned a PhD degree in Computer Science in 1991 from The University of Minnesota (Minneapolis, USA), an MS degree in Operations Research in 1984 from Qufu Normal University (Qufu, China), and a BS degree in Mathematics in 1981 from Qufu Normal University (Qufu, China). His research interests include Quality of Service provisioning, resource allocation in wireless networks, survivability and security issues in networking (both wireless and wireline). His research has been continuously supported by federal agencies including NSF and ARO. He has published over 170 refereed papers, including over 80 journal papers.

**Dr. Abdallah Shami** received the B.E. degree in Electrical and Computer Engineering from the Lebanese University, Beirut, Lebanon in 1997, and the Ph.D. Degree in Electrical Engineering from the Graduate School and University Center, City University of New York, New York, NY in September 2002. In September 2002, he joined the Department of Electrical Engineering at Lakehead University, Thunder Bay, ON, Canada as an Assistant Professor. Since July 2004, he has been with The University of Western Ontario, London, ON, Canada where he is currently an Associate Professor in the Department of Electrical and Computer Engineering. His current research interests are in the area of wireless/optical networking