12th IEEE International Conference on Mobile Ad-hoc and Sensor Systems
(IEEE MASS 2015)

Dallas, Texas (USA), October 19-22, 2015   Submission Deadline: April 3, 2015
General Chair: Tarek Abdelzaher, UIUC; Program Chair: Mingyan Liu, University of Michigan

Algorithms and Theory (Chair: Xinbing Wang, Shanghai Jiao Tong University, China)
Systems, Protocols, and Applications (Chair: Baochun Li, University of Toronto, Canada)
Experimental Evaluation and Testbeds (Chair: Kay Römer, Graz University of Technology, Austria)

Local Arrangements: Ravi Prakash, U.T. Dallas, USA. Registration/Finance: Zhen Jiang, West Chester U., USA. Publications: Dajin Wang, Montclair State U., USA. Web: Qing Cao, University of Tennessee, Knoxville, USA

Scope

The 12th IEEE International Conference on Mobile Ad hoc and Sensor Systems (IEEE MASS 2015) will be held in Dallas, Texas, USA, October 19 – 22, 2015. Wireless ad hoc communication, Internet of Things, and mobile computing have applications in a variety of environments, such as smart homes, hospitals, battlefields, and disaster-recovery operations. Wireless sensor and actuator networks are being deployed for enhancing industrial control processes and supply-chains, and for various forms of environmental monitoring. IEEE MASS 2015 is a three-track conference sponsored by the IEEE Computer Society. It aims at addressing research advances in mobile ad-hoc and sensor systems related to (i) algorithms and theory, (ii) systems, protocols, and applications, and (iii) experimental evaluation and testbeds, covering topics ranging from theoretical foundations to applications and testbed development.

Topics of Interest

Original, unpublished contributions are solicited in all aspects of mobile ad hoc networks (MANETs), wireless sensor networks (WSNs) (including cyber-physical systems, Internet of Things), and mobile networking/computing, including theory, systems and applications. Topics of interest include, but are not limited to:

- Algorithmic aspects of MANETs and WSNs
- Application Layer Protocols
- Architectures of wired/wireless networks
- Capacity planning and admission control
- Clustering, topology control, coverage, and connectivity
- Cognitive networking
- Cooperative and cognitive communication
- Cooperative sensing in WSNs
- Compressive sensing technologies
- Crowd-sourcing, participatory and social sensing
- Cross layer design and optimization
- Cyber-physical systems
- Data gathering, fusion, and dissemination
- Data transport and management in WSNs
- Delay tolerant networks
- Experiences, real-world applications and deployments
- Handoff/mobility management and seamless internetworking
- Internet/Cloud of Things
- Key management and trust establishment
- Localization and Location Based Services
- MAC protocols, including 802.11, 802.15.4, UWB
- MAC-layer design for ad hoc networks and WSNs
- Machine-to-machine (M2M) communications
- Measurements, experimental systems and test-beds
- Mobile computing and networking Mobility management

- Modeling, analysis and performance evaluation
- Multi-channel, multi-radio and MIMO technologies
- Network Layer protocols
- Networked smartphone applications
- Novel applications and architectures for WSNs
- Operating systems and middleware support
- Opportunistic networking
- P2P, overlay, and content distribution
- Power-aware architectures, algorithms, and protocols
- QoS and Resource management
- Reliability, resiliency and fault tolerance techniques
- Resource management and wireless QoS provisioning
- Robotic networks
- Routing protocols, including unicast, multicast, broadcast, geocast
- Security and privacy issues in ad hoc and sensor networks, and mobile networking
- Smart grid
- Smart healthcare
- Smart transportation
- Social networks using smartphones and sensors
- Time synchronization
- Topology control, coverage and connectivity issues
- Vehicular networks and protocols
- Wireless mesh networking

Paper Submission and Review

Authors are invited to submit technical papers presenting original, unpublished research, not currently under review elsewhere. All submissions should be written in English with a maximum length of 9 single-spaced, double-column pages using 10pt size fonts on 8.5 x 11 inch pages, with a side margin of at least 1 inch, including all figures, tables, and references, in the PDF format. Accepted papers will appear in the conference proceedings published by IEEE and will be presented at the conference. Based on reviews and TPC discussions, the TPC may choose to accept some papers as short papers (5 pages). For all papers, IEEE reserves the right to exclude the paper from distribution after the conference (e.g., removal from IEEE Xplore) if the paper is not presented at the conference. The conference will also include a poster and demo session.