

11th IEEE International Conference on Mobile Ad-hoc and Sensor Systems (IEEE MASS 2014)

Philadelphia, Pennsylvania (USA), Oct 28-30, 2014. Deadline: April 18, 2014
General Chair: J. J. Garcia-Luna-Aceves, UCSC. Program Chair: Tarek Abdelzaher, UIUC

Algorithms and Theory (Chair: Habib M. Ammari, *University of Michigan-Dearborn*)
Systems, Protocols, and Applications (Chair: Jiannong Cao, *Hong Kong Polytechnic University*)
Experimental Evaluation and Testbeds (Chair: Thiemo Voigt, *Uppsala University*)

Scope:

The 11th IEEE International Conference on Mobile Ad hoc and Sensor Systems (IEEE MASS 2014) will be held in Philadelphia, USA, 2014. Wireless ad hoc communication and mobile networking/computing have applications in a variety of environments, such as conferences, hospitals, battlefields, and disaster-recovery/rescue operations, and are also being actively investigated as an alternative paradigm for Internet connectivity in both urban and rural areas. 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 2014 is a three-track conference sponsored by the IEEE Computer Society. It aims at addressing research advances in (i) algorithms and theory, (ii) systems, protocol, and applications, and (iii) experimental evaluation and testbeds, in multi-hop wireless ad hoc and sensor networks, covering topics ranging from technology issues to applications and test-bed 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Original, unpublished contributions are solicited in all aspects of mobile ad hoc networks (MANETs), wireless sensor networks (WSNs) (including cyber-physical systems, Internet of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 | Modeling, analysis and performance evaluation |
| Application Layer Protocols | Multi-channel, multi-radio and MIMO technologies |
| Architectures of wired/wireless networks | Network Layer protocols |
| Capacity planning and admission control | Networked smartphone applications |
| Clustering, topology control, coverage, and connectivity | Novel applications and architectures for WSNs |
| Cognitive networking | Operating systems and middleware support |
| Cooperative and cognitive communication | Opportunistic networking |
| Cooperative sensing in WSNs | P2P, overlay, and content distribution |
| Compressive sensing technologies | Power-aware architectures, algorithms, and protocols |
| Crowd-sourcing, participatory and social sensing | QoS and Resource management |
| Cross layer design and optimization | Reliability, resiliency and fault tolerance techniques |
| Cyber-physical systems | Resource management and wireless QoS provisioning |
| Data gathering, fusion, and dissemination | Robotic networks |
| Data transport and management in WSNs | Routing protocols, including unicast, multicast, broadcast, geocast |
| Delay tolerant networks | Security and privacy issues in ad hoc and sensor networks, and mobile networking |
| Experiences, real-world applications and deployments | Smart grid |
| Handoff/mobility management and seamless internetworking | Smart healthcare |
| Internet/Cloud of Things | Smart transportation |
| Key management and trust establishment | Social networks using smartphones and sensors |
| Localization and Location Based Services | Time synchronization |
| MAC protocols, including 802.11, 802.15.4, UWB | Topology control, coverage and connectivity issues |
| MAC-layer design for ad hoc networks and WSNs | Vehicular networks and protocols |
| Machine-to-machine (M2M) communications | Wireless mesh networking |
| Measurements, experimental systems and test-beds | |
| Mobile computing and networking | |
| Mobility management | |

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 side-margin at least 1 inch, including all figures, tables, and references. All paper submission will be electronic, in 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.