Call for papers
Wireless Ad Hoc and Sensor Networks (WAHS)
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Symposium Co-chairs
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Scope
The Wireless Ad Hoc and Sensor Networks Symposium cover all topics related to ad hoc networks and sensor networks. A wireless sensor network is a wireless network consisting of spatially distributed nodes with limited resources that can cooperatively monitor physical or environmental conditions at different locations. Each node is capable of computation, sensing, and communication. Challenges may be exacerbated by the presence of mobile nodes in the network. Such networks may consist of independent and isolated fixed devices that gather environmental data, which may be embedded in urban environments in order to facilitate actuation over managed resources, or may be fixed to and move with the object of interest. Ad hoc networks may exist in environments where there is no pre-existing communications infrastructure, and thereby organize to create their own. Ad hoc networks have been attracting great attention from the research and engineering communities, motivated by applications like digital battlefield, asset tracking, air-borne safety, situational awareness, and border protection. As we move towards a world that connects all things, these issues become ever more relevant. Dynamic topologies, bandwidth constraints, energy constrained operations, wireless vulnerabilities, and limited physical security are among the characteristics that differentiate mobile ad hoc networks from fixed multi-hop networks.

This symposium aims to provide a forum for sharing ideas among researchers and practitioners working on state-of-the-art solutions to the challenges of wireless ad hoc and sensor networks. We solicit papers that present original and unpublished contributions addressing various aspects of ad hoc and sensor networks. Topics include but are not limited to,

- Applications and Evolutions of Ad Hoc and Sensor Networks
- Implementation Challenges
- Novel Measurement Techniques
- Physical Layer Design of Ad Hoc and Sensor Networks
- Frequency and Channel Allocation Algorithms
- Topology Control and Management
- Opportunistic or delay-tolerant communications
- Algorithms and Modeling for Localization, Target Tracking, and Mobility Management
- Time Synchronization in Ad Hoc and Sensor Networks
- Architectures of Ad Hoc and Sensor Networks
- MAC Protocols for Ad Hoc and Sensor Networks
- QoS Provisioning in MAC and Routing for Ad Hoc and Sensor Networks
- Analytical, Mobility, and Validation Models for Ad Hoc and Sensor Networks
- Performance Evaluation and Modeling
● Integrated Simulation and Measurement based Evaluation of Ad Hoc and Sensor Systems
● New Simulation Languages, Methodologies, and Tools for Wireless Systems
● Analysis of Correctness and Efficiency of Protocols
● Data Management, Data Aggregation, Data Dissemination, and Query Processing
● Distributed Algorithms in Ad Hoc and Sensor Networks
● Pricing Modeling and Solutions
● Pervasive and Wearable Computing
● Co-existence Issues of Hybrid Networks
● Energy Saving and Power Control Protocols for Ad Hoc and Sensor Networks
● Resource Management Algorithms in Wireless Ad Hoc and Sensor Networks
● Real-world Measurements or Test beds
● Cross-layer Design and Infrastructure
● Energy Efficiency Considerations on the Design or Implementation of Ad Hoc and Sensor
● Internet of things
● Underwater Acoustic Sensor Networks
● Cognition in Wireless Ad Hoc and Sensor Networks
● Participatory sensing
● Crowdsourcing

Submission Guidelines

Please follow the author instructions at http://www.conf-icnc.org/2015/author.htm
Direct paper submission weblink of this symposium can be found at http://www.conf-icnc.org/2015/cfp.htm

Short biography of co-chairs

Dr. Yanmin Zhu
Yanmin Zhu is an Associate Professor in the Department of Computer Science and Engineering at Shanghai Jiao Tong University. Prior to joining Shanghai Jiao Tong University, he was a Research Associate with the Department of Computing at the Imperial College London. He received his PhD from the Department of Computer Science and Engineering at the Hong Kong University of Science and Technology (HKUST) in 2007, and his bachelor degree from Xi’an Jiao Tong University (XJTU) in July 2002. His research interests include wireless sensor networks, ad hoc networks, vehicle ad hoc networks, Internet of Things, mobile computing, and participatory sensing. He has published more than 90 papers in his research areas, including more than 30 papers in journals and around 60 papers in conferences. Some of the papers appear in prestigious journals such as IEEE Journal on Selected Areas in Communications, and IEEE Transactions on Parallel and Distributed Systems, and in prestigious conferences such as INFOCOM, and ICDCS. He received two Best Paper Awards from two international conferences, i.e., MSN’2012 and ICEBE’05. He severed the TPC member in a number of mainstream conferences, such as INFOCOM 2011-2014, ICDCS’14, GLOBECOM’13, etc.

Dr. Falko Dressler
Falko Dressler is a Full Professor for Computer Science and head of the Computer and Communication Systems Group at the Institute of Computer Science, University of Paderborn, Germany. He is an Editor for journals such as IEEE Trans. on Mobile Computing, Elsevier Ad Hoc Networks, ACM/Springer Wireless Networks (WINET), and Elsevier Nano Communication Networks. He was Guest Editor of special issues on self-organization, autonomic networking, and bio-inspired communication for IEEE Journal on Selected Areas in Communications (JSAC), Elsevier Ad Hoc Networks, and other. Dr. Dressler was General Chair of IEEE/ACM BIONETICS 2007, IEEE/IFIP WONS 2011, and IEEE VNC 2014, TPC Co-Chair for IEEE VNC, IEEE VTC, IEEE GLOBECOM, and ACM MobiWIM, Area TPC Chair for IEEE INFOCOM, and Poster/Demo Chair for ACM MobiCom. He regularly serves in the program committee of leading IEEE and ACM conferences. Dr. Dressler wrote the textbook Self-Organization in Sensor and Actor Networks, published by Wiley in 2007. Dr. Dressler is an IEEE Distinguished Lecturer in the fields of inter-vehicular communication, self-organization, and bio-inspired and nano-networking. Dr. Dressler is a Senior Member of the IEEE as well as a Senior Member of the ACM. He is actively participating in the IETF standardization. His research activities are focused on adaptive wireless networking and self-organization methods with applications in wireless ad hoc and sensor networks, inter-vehicular communication, bio-inspired and nano-networking, and network security.
**Dr. Xiaoyan Hong**

Xiaoyan Hong is an associate professor in the Department of Computer Science at the University of Alabama and directs the Wireless, Mobile and Networking Research Lab (WiMaN). She received her Ph.D. degree in Computer Science from the University of California at Los Angeles. She received Bachelor and Master Degrees both from Computer Science and Technology Department at Zhejiang University, P.R. China. Currently, her research interests are in delay tolerant networks, vehicle ad hoc networks, information system for intelligent transportation systems, and network virtualization. In particular, her interests include routing protocols, mobility, network scalability, privacy, secure network protocols, and vulnerability analysis. Dr. Hong's research is supported by NSF, BBN/NSF contact and Research Grants Committee of University of Alabama.