## **ICNC 2013**

# Call for papers

## Wireless Ad Hoc and Sensor Networks Symposium

San Diego, Jan. 28-31, 2013 http://www.conf-icnc.org/2013

#### **Symposium Co-chairs**

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### Scope

The Wireless Ad Hoc and Sensor Networks Symposium focuses on all topics related to ad hoc and sensor networking. A wireless sensor network is a wireless network consisting of populations of spatially distributed limited-resource nodes that 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. The applicability of such a network is vast. Such networks may consist, for example, of independent and isolated fixed devices that gather environmental data, they 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. 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 We seek papers that describe original and unpublished contributions addressing various aspects of ad hoc and sensor networks.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
- Autonomic Networking
- 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
- 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 testbeds
- Cross-layer design and infrastructure
- Energy considerations in design or implementation

#### **Submission Guidelines**

Please follow the author instructions at <u>http://www.conf-icnc.org/2013/author.htm</u>. Direct paper submission weblink of this symposium can be found at <u>http://www.conf-icnc.org/2013/cfp.htm</u>.

#### **Short Biography of Co-chairs**

Jalel Ben-Othman received his B.Sc. and M.Sc. degrees both in Computer Science from the University of Pierre et Marie Curie, (Paris 6) France in 1992, and 1994 respectively. He received his PhD degree from the University of Versailles, France, in 1998. He was an Assistant Professor at the University of Orsay (Paris 11) and University of Pierre et Marie Curie (Paris 6), in 1998 and 1999 respectively. He was an Associate Professor at the University of Versailles from 2000 to 2011. He is now full professor at University of Paris 13. Dr. Ben-Othman's research interests are in the area of wireless ad hoc and sensor networks, Broadband Wireless Networks, multiservices bandwidth management in WLAN (IEEE 802.11), WMAN (IEEE 802.16), WWAN (LTE), security in wireless networks in general and wireless sensor and ad hoc networks in particular. His work appears in highly respected international journals and conferences, including, IEEE ICC, Globecom, LCN, VTC, PIMRC, etc. He has supervised and co-supervised several graduate students in these areas. He is widely known for his work on wireless ad hoc and sensor Networks, in particular, security. He is an editorial board member of Wiley Wireless Communications and Mobile Computing, Inderscience Int. J. of Satellite Communications Policy and Management and an Associate Editor of Wiley International Journal of Communication Systems. He has served as a member of Technical Committees of more than 40 international IEEE/ACM conferences and workshops including ICC, Globecom, MSWIM, LCN. He is a member of IEEE and ACM. He served as Local Arrangement Chair for the 13th IEEE International Symposium on Computer Communication (ISCC 09). He served as a TPC Co-Chair of IEEE Globecom Wireless Communications Symposium (Globecom 2010) and 9th international Workshop on Wireless local Networks (WLN09) and 10th international Workshop on Wireless local Networks (WLN10). He served as a publicity chair of several conferences such as the 12th ACM International Conference on Modelling, Analysis and Simulation of Wireless

and Mobile Systems (MSWIM 09), IEEE International Symposium on a World of Wireless Mobile and Multimedia Networks (WOWMOM 2010), 25th Biennial Symposium on Communications. Currently he is serving as TPC Co-Chair for IEEE Globecom Ad hoc, Sensor and Mesh Networking (Globecom 2011), 6th ACM International Symposium on QoS and Security for Wireless and Mobile Networks (Q2SWinet 2010), Wireless Networking Symposium of The 7th International Wireless Communications and Mobile Computing Conference (IWCMC 2011), IEEE International Conference on Communications Ad hoc, Sensor and Mesh Networking (ICC 2012). He is the secretary of AHSN TC and active member of IEEE CIS-TC, and WTC.

Cheng Li received the B. Eng. and M. Eng. degrees from Harbin Institute of Technology, Harbin, P. R. China, in 1992 and 1995, respectively, and the Ph.D. degree in Electrical and Computer Engineering from Memorial University, St. John's, Canada, in 2004. He is currently an Associate Professor at the Faculty of Engineering and Applied Science of Memorial University, St. John's, Canada. His research interests include mobile ad hoc and wireless sensor networks, wireless communications and mobile computing, switching and routing, and broadband communication networks. He is an editorial board member of Wiley Wireless Communications and Mobile Computing, an associate editor of Wiley Security and Communication Networks, and an editorial board member of Journal of Networks, International Journal of E-Health and Medical Communications and KSII Transactions on Internet and Information Systems. He has served a technical program committee (TPC) co-chair for the IEEE WiMob'11 and QBSC'10. He has served as a co-chair for various technical symposia of many international conferences, including the IEEE GLOBECOM and ICC. He has served as the TPC member for many international conferences, including the IEEE ICC, GLOBECOM, and WCNC. Dr. Li is a registered Professional Engineer (P.Eng.) in Canada and is a Senior Member of the IEEE and a member of the IEEE Communication Society, Computer Society, Vehicular Technology Society, and Ocean Engineering Society.

**Marwan Fayed** received his MSc from Boston University and his PhD from the University of Ottawa, in 2003 and 2009 respectively. He joined the University of Stirling, UK in 2009 as an assistant professor appointed under the Scottish Informatics and Computer Science Alliance funding scheme. His current research interests lie in wireless communications and algorithms, as well as network measurement and modeling. He has served on the program committees of IEEE and ACM conferences. Marwan is the holder of a Best Paper Award (IEEE CCECE 2009) and a member of both the IEEE and ACM.