



Ad-hoc and Sensor Networking Symposium

Symposium Co-Chairs

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The 2015 IEEE International Conference on Communications (ICC) will be held in London, UK from 8-12 June 2015. Themed “Smart City & Smart World,” with its proximity to Tech City, the fastest growing technology cluster in Europe, this flagship conference of IEEE Communications Society will feature a comprehensive technical program including twelve Symposia and a number of Tutorials and Workshops. IEEE ICC 2015 will also include an exceptional Industry Forum & Exhibition program including business panels and keynote speakers. We invite you to submit your original technical papers, and industry forum, workshop, and tutorial proposals to this event. Accepted and presented papers will be published in the IEEE ICC 2015 Conference Proceedings and submitted for inclusion in IEEE Xplore@IEEE Digital Library. Full details of submission procedures are available at <http://www.ieee-icc.org/2015>.

Scope and Topics of Interest

The Ad-hoc and Sensor Networking Symposium focuses on all topics related to ad-hoc and sensor networks. Ad-hoc networks are communication networks with no pre-existing communication infrastructure and hinge largely upon the so-called self-organizing capability operating in a distributed fashion. Such networks are attracting in many practical scenarios due to its adaptability to the ever changing environments. Sensor networks are networks consist of multiple devices (sensor nodes), usually large in number and possibly sparse in spatial distribution, that have various sensing capability and cooperate to accomplish common tasks. Ad-hoc and sensor networks have solicited huge interests in both academia and industry in the past, due to their wide application areas ranging from military battle field communication to environmental monitoring. Recently, further research interests in ad-hoc and sensor networks are sparked by the surging interests on the concept of the Internet of Things (IoT), the Smart Cities, the Body Area Networks (BAN), and the Machine-to-Machine Communications (M2M) for the 5th Generation Mobile Systems (5G). The fact that the very theme of the ICC 2015 is named as “Smart City & Smart World” can only say more about the importance of research in this promising field. Despite the cumulative effort of past research, vast challenges still exist, such as spectrum allocation and the addressing of large number of devices, autonomic networking, time synchronization, and topology control, just to name a few.

This symposium aims at providing a forum for sharing ideas among researchers and practitioners working on state-of-the-art solutions to the challenges in ad-hoc and sensor networks. We are seeking papers that describe original and unpublished contributions addressing various aspects in this field.

The Ad-hoc and Sensor Networking Symposium of ICC 2015 aims at providing a forum for sharing ideas among researchers and practitioners working on state-of-the-art solutions related to Ad-hoc and Sensor Networking. The symposium solicits original contributions in, but not limited to, the following:

- Sensor and actuator networks,
- Vehicle ad-hoc networks,
- Mobile social network,
- Delay tolerant networks and opportunistic networking,
- Internet of Things (Protocols, Architectures & Novel Applications),
- Application and evolution of ad-hoc and sensor networks,

- Autonomic networking,
- Wireless, ad-hoc, and sensor devices,
- Physical layer design,
- Frequency and channel allocation algorithms,
- Topology control and management,
- Algorithms and modelling for localization, target tracking, and mobility management,
- Architectures of wireless communication and mobile computing in ad-hoc and sensor networks,
- MAC protocols for ad-hoc and sensor networks,
- QoS provisioning in medium access control and routing,
- Analytical, mobility, and validation models,
- Performance evaluation and modelling,
- Integrated simulation and measurement based evaluation,
- New simulation languages, methodologies, and tools for wireless systems in ad-hoc and sensor networks,
- Analysis of correctness and efficiency of protocols,
- Data management, data aggregation, data dissemination, and query processing,
- Distributed algorithms,
- Pricing modelling and solutions,
- Pervasive and wearable computing,
- Co-existence issues of hybrid network,
- Energy saving and power control protocols,
- Resource management algorithms,
- Synchronization and scheduling issues,
- Service discovery,
- Cross-layer design and interactions,
- Mobile service and QoS management,
- Survivability and reliability evaluation and modelling,
- Ubiquitous and mobile access,
- Security and privacy issues,
- Information infrastructure,
- Underwater acoustic sensor networks,
- Cognition in ad-hoc and sensor networks,
- Smart healthcare,
- Machine-to-machine (M2M) communications,
- Compressive sensing

Submission Guidelines

Prospective authors are invited to submit original technical papers by the deadline 15 October 2014 for publication in the IEEE ICC 2015 Conference Proceedings. All submissions should be written in English with a maximum paper length of Six (6) 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
<https://edas.info/newPaper.php?c=17713>

Co-Chairs Biographies

Dr. Yang Yang is currently a Professor with the School of Information Science and Technology, ShanghaiTech University, and the Director of Shanghai Research Center for Wireless Communications (WiCO). Prior to that, he has served Shanghai Institute of Microsystem and Information Technology (SIMIT), Chinese Academy of Sciences, as a Professor; the Department of Electronic and Electrical Engineering at University College London (UCL), United Kingdom, as a Senior Lecturer; the Department of Electronic and Computer Engineering at Brunel University, United Kingdom, as a Lecturer; and the Department of Information Engineering at The Chinese University of Hong Kong as an Assistant Professor. His research interests include wireless ad hoc and sensor networks, wireless mesh networks, next generation mobile cellular systems, intelligent transport systems, and wireless testbed development and practical experiments. He is a senior member of IEEE.

Dr. Xinming Huang is an Associate Professor in the Department of Electrical and Computer Engineering at the Worcester Polytechnic Institute (WPI), Worcester, MA. He received his PhD in electrical engineering from Virginia Tech, Blacksburg, VA in 2001. Previously he was a Member of Technical Staff at the wireless advanced technology laboratory, Bell Labs of Lucent Technologies. His research interests include circuits and systems for wireless communications and error correction coding, design optimization of wireless networks, and security of embedded systems and sensors. He was among the recipients of the IEEE HKN outstanding professor award in 2012, DARPA young faculty award in 2007, IBM faculty Award in 2004, and the central Bell Labs annual excellence award in 2002. He is a member of IEEE technical committee on circuits and systems for communications. He is a senior member of IEEE.

Lynda Mokdad received her PhD. in computer science from the University of Versailles, France in 1997. She was associate professor at University Paris-Dauphine from 1998 to 2009. She is currently full professor at University Paris-Est, Créteil since 2009. Her main research interests are about performance evaluation techniques and applications in wired, mobile and wireless networks, Ad hoc networks and in software technologies as Web services. She is recipient of the best paper awards of IEEE International Conference on Communications and Information Technology (ICCIT 2011) and IEEE International Conference on Communications (ICC 2011). She has served as technical committee for more than 50 international IEEE/ACM conferences and workshops including ICC, GlobeCom, MSWIM, LCN, etc. She is a member of IEEE and ACM. She also served as a TPC Co-Chair of Communication Software symposium at IEEE International Conference on Communications (ICC'13), Ad hoc and Sensor Networks symposium at Global Communications Conference (GlobeCom 12); 5th and 6th IEEE International Workshop on Performance Management of Wireless and Mobile Networks (P2MNET 09 and 10); She is the founder and chair of IEEE performance evaluation of communications in distributed systems and Web based service architectures (PEDISWESA) which arrives this year at the sixth edition. She was co-chair of 11th international Workshop on Wireless local Networks (WLN 11) as well. She served as a publicity chair of 12th ACM International Conference on Modeling, Analysis and Simulation of Wireless and Mobile Systems (MSWIM10) and as awards chair of the 8th ACS/IEEE International Conference on Computer Systems and Applications (AICCSA-10). She serves as editor of Wiley International Journal of Communication Systems (IJCS) and Wireless Communications and Mobile Computing (WCMC). She was secretary of IEEE Communication software (CommSoft) and she is currently serving as a Vice chair. She is active member of IEEE Ad hoc and sensor Networks.

David J. Parish is Dean of the School of Electronic, Electrical and Systems Engineering at Loughborough University, UK. He is also a Professor of Communication Networks and leads the High Speed Networks Research Group in the School. He joined Loughborough as a Lecturer in 1983. He holds a B.Sc (Hons) and a Ph.D. degree from the University of Liverpool, UK. He conducts research in the general area of Communication Network Management, Architecture, Security and Applications. He has directly held research funding of over £2.5M; and is currently co-leading a Workpackage on a £4M research activity related to anomaly detection in communication networks as part of a major initiative in Signal Processing for the Networked Battlespace. He has graduated over 30 Ph.D. research students. His work on Communication Network Performance Measurement led to the deployment of measurement system on three UK networks, two of which were commercially deployed. He is a member of the UK research proposal review panel known as the EPSRC College of Peers and a Past Member of EPSRC ICT SAT and is currently Deputy Chair and Treasurer, IEEE UK Communications Chapter (UKRI ComSoc).