



Call for Papers for Selected Areas in Communications Symposium Internet of Things Track

Scope and Motivation:

The Internet of Things track will focus on future technologies and research challenges associated to with new applications and services bridging the physical and virtual worlds. The Internet of Things is a key enabler for the realization of new Smart-* realm (Smart Cities, Smart Buildings, Smart Factories, Smart Agriculture, Smart Mobility, etc.) as it allows for the pervasive interaction with/between smart things leading to an effective integration of information into the digital world. These smart (mobile) things - which are instrumented with sensing, actuation, and interaction capabilities - have the means to exchange information and influence the real (physical) world entities and other actors of a smart -* eco-system in real time, forming a smart pervasive computing environment. The objective is to reach a global access to the services and information through Internet of Things by providing efficient support for global communications.

The aim of the Internet of Things track is to bring together researchers from both academia and industry in order to have a forum for discussion and technical presentations on the recent advances in theory, application and implementation of the Internet of Things concepts.

Main Topics of Interest:

The Internet of Things Track seeks original contributions in the following (but not limited to) topical areas:

- Future technologies bridging the physical and virtual words
- IoT Devices (Sensor, Actuators, Smart Objects, Vehicles, Smart Phones)
- Constrained Devices and Gateways for the IoT
- Energy and Power-Saving Technologies for the IoT
- Routing and Control Protocols for the IoT
- Mobility, Localization, and Management Aspects of the IoT
- Indexing, naming, and addressing the Internet of Things
- Information-Centric IoT Networking
- Machine to Machine (M2M) protocols
- Cloud computing, Distributed Storage and IoT internetworking





- Security, Trust, Privacy, Identity Management and Object Recognition in the IoT
- IoT Architectures and Middlewares
- IoT Resource Management and Access Control
- Intelligent data processing for the IoT
- Sensors Data management, Big Data and Data Mining, Data Fusion
- Distributed Sensing and Control,
- Web of Things
- Semantic Technologies for the IoT
- Embedded Web Services
- User-oriented, context-aware IoT services
- Semantic technologies for devices and services
- Lightweight structured data (EXI, JSON...)
- Novel concepts, such as Crowd-sourcing
- New services through mobile computing and smart phones interaction
- Mobile integration of the Web of Things
- Experiences with Open Platforms and hardware within IoT
- Experiences and field trials of IoT applications.
- Building automation and smart buildings
- IoT in homes, building, factories, cities, smart grid, e-health, agriculture and environment, manufacturing, logistics, social networking, etc.

Sponsoring Technical Committees:

- Technical Committee on Information Infrastructure and Networking
- Internet of Things Technical sub-Committee

How to Submit a Paper:

The IEEE Globecom 2016 website provides full instructions on how to submit papers. You will select the desired symposium when submitting. The paper submission deadline is April 1, 2016. Unlike recent ICC's and Globecom's, this is a hard deadline that will not be extended.

Symposium Co-Chairs:

- Nidal Nasser, Alfaisal University, Saudi Arabia, <u>nnasser@alfaisal.edu</u>
- Mohammed Atiquzzaman, University of Oklahoma, USA, atiq@ou.edu





Biographies:



Dr. Nidal Nasser completed his Ph.D. in the School of Computing at Queen's University, Kingston, Ontario, Canada, in 2004. He is currently a Professor and Acting Dean of the College of Engineering at Alfaisal University, Saudi Arabia. He worked in the School of Computer Science at University of Guelph, Guelph, Ontario, Canada (2004-2011). Dr. Nasser was the founder and Director of the Wireless Networking and Mobile Computing Research Lab @ Guelph (WiNG: http://wing.socs.uoguelph.ca). He has authored 150 journal publications, refereed conference publications and book chapters in the area of wireless communication networks and systems. He has also given tutorials in major international conferences. Dr. Nasser is currently serving as an associate editor of IEEE Wireless Communications Magazine, Wiley's International Journal of Wireless Communications and Mobile Computing, Wiley's International Journal on Communication Systems, Wiley's Security and Communication Networks Journal and IEEE CommSoft E-letter. He has been a member of the technical program and organizing committees of several international IEEE conferences and workshops. Dr. Nasser is a member of several IEEE technical committees. He received Fund for Scholarly and Professional Development Award in 2004 from Queen's University. He received the Computing Faculty Appreciation Award from the University of Guelph-Humber. He received the Best Research Paper Award at the ACS/IEEE International Conference on Computer Systems and Applications (AICCSA'08), at the International Wireless Communications and Mobile Computing Conference (IWCMC'09), at the International Wireless Communications and Mobile Computing Conference (IWCMC'11), at the International Conference on Computing, Management and Telecommunications (ComManTel'13), and at the IEEE International Conference on Communications (ICC'14).

Dr. Mohammed Atiquzzaman Dr. Atiquzzaman holds the Edith J. Kinney Gaylord Presidential Professor in the School of Computer Science at The University of Oklahoma. He received M.Sc. and Ph.D. from the University of Manchester, England. Dr. Atiquzzaman is the Editor-in-Chief of Journal of Network and Computer Application, Founding Editor-in-Chief of Vehicular Communications. He was the co-Editor-in-Chief of Computer Communications, and serves/served on the editorial boards of the IEEE Communications Magazine, International





Journal of Sensor Networks, Journal of Real Time Image Processing, International Journal on Wireless and Optical Communications, International Journal of Communication Systems, International Journal of Communication Networks and Distributed Systems, Real Time Imaging journal, and Telecommunication Systems. He has guest edited many special issues in various journals, and organized special sessions at conferences. He has chaired many conferences including ICC and Globecom symposiums, SPIE Next-Generation Communication and Sensor Networks, and IEEE Workshop on High Performance Switching and Routing.

Dr. Atiquzzaman's current research interests are in wireless, satellite, and mobile networks, quality of service for next-generation Internet, broadband networks, multimedia over high-speed networks and transport layer protocols. He is co-author of the book "TCP/IP over ATM Networks." His research is supported by National Science Foundation (<u>NSF</u>), National Aeronautics and Space Administration (<u>NASA</u>), <u>U.S. Air Force</u>, Honeywell, Cisco, Oklahoma Department of Transportation, etc. He received the OU <u>Regents' award</u> for superior accomplishment in research and creative activity, NASA Group Achievement Award, IEEE Communication Society's <u>Fred W. Ellersick Prize</u>, and Institution of Electrical Engineers (IEE, UK) <u>Premium Award</u>.