The IEEE GLOBECOM 2016 First International Workshop on the Internet of Everything (IoE)

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Important Dates

Paper Submission: July 1, 2016
Acc. Notification: September 1, 2016
Camera Ready: October 1, 2016

Call for Paper

The coming decade will be marked by a large-scale, pervasive wireless interconnection of devices, sensors, smartphones, wearable devices, vehicles, drones, and mundane objects into a massive cyber-physical Internet of Everything (IoE) system. It is anticipated that the IoE will provide connectivity for billions of devices and millions of individuals worldwide. However, such an interconnection will only be possible if a reliable and high-speed wireless communication infrastructure is built to sustain the massive and heterogeneous traffic stemming from the IoE. Such an infrastructure will encompass a variety of wireless systems, ranging from cellular networks to WLANs. Owing to its pervasiveness, scale, and heterogeneity, the IoE will introduce many novel and unique challenges for wireless communications that range from enabling a co-existence between machine type devices and human type devices to delivering ultra-low latency communication and developing resource allocation mechanisms that adapt to the heterogeneous IoE environment. Moreover, the IoE will also incorporate emerging technologies such as drone-based and UAV communications with their unique challenges.

This workshop aims to attract high quality contributions in the general area of IoE. The goal is to provide attendees a comprehensive view of the latest developments in this area. The scope of this workshop covers but is not limited to the following topics of interest to IoE community:

- Big data analytics for IoE communication.
- Multiple access protocols and resource management mechanisms for the IoE.
- Performance analysis of M2M communications within the IoE.
- Designs that cater for ultra-low latency and ultra-reliability.
- Buffering, queueing, and caching in the IoE.
- Fog computing, Internet of moving and flying things.
- Game-theoretic and learning mechanisms for the IoE.
- Energy efficiency and spectral efficiency enhancements for IoE.
- Co-existence of wireless technologies in IoE.
- Millimeter wave communication between wearable devices in an IoE environment.
- Massive access management in cellular-based IoE.
- Context aware and predictive IoE communication.
- Security and privacy in the IoE.
- Cyber-physical solutions for the IoE.
- Self-driving and connected vehicles, V2V/V2X.

This 1st IEEE GLOBECOM 2016 workshop on the IoE features keynote addresses by D. Richard Brown (NSF, USA), Mung Chiang (Princeton Univ., USA), and Howard Huang (Bell-Labs, USA). The workshop accepts only novel, previously unpublished papers. All submissions should be written in English with a maximum five (5) printed pages (10-point font) including figures without incurring additional page charges (maximum 1 additional page with over-length page charge if accepted)