



Call for Papers for *IoT & Sensor Networks Symposium*

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SCOPE AND MOTIVATION:

With the promise of revolutionizing and the arrival of 5G networks, the way we live, work, and manufacture, it is no surprise why the Internet of Things (IoT) has picked up momentum in both industry and academia. Thanks to the increased connectivity and the continued miniaturization of computers and smart devices, IoT will generate huge volumes of data to be analyzed to uncover hidden patterns, correlations, and other insights. Moreover, in the industrial environments (Industry 4.0) and in smart spaces (buildings, houses, etc.) and connected vehicles, communications will require higher reliability, lower latency, and scalability. Several technologies such as BLE, Zigbee, WirelessHART, IEEE Std 802.15.4 TSCH, 6TiSCH, LPWAN (LoRa, Sigfox, NB-IoT, LTE-M etc.). RAW have been proposed to tackle these requirements. The forthcoming 5G networks promise increased data rates and ultra-low data latency communication for critical IoT applications that require extreme reliability. 5G will enable Machine Type Communication (MTC), one of the most promising technologies for IoT applications, gaining a tremendous interest among mobile network operators, equipment vendors, MTC specialist companies, and research bodies. These anticipated high-traffic demands, low-latency, and deterministic delivery requirements stemming from IoT and Machine-to-Machine (M2M) communications can be met only with radical changes in architecture and communication solutions. Recently, the Fog/Edge-to-thing continuum is proposed to mitigate the heavy burden on the network due to the centralized processing and storing of the massive IoT data. Fog/Edge-enabled IoT architectures ensure closer processing in proximity to the things, which results in small, deterministic latency that enables real-time applications and enforced security. The IoT and Sensor Networks Symposium at IEEE ICC 2022 aims at a forum that brings together scientists and researchers to present their cutting-edge innovations in all aspects of the field.

TOPICS OF INTEREST:

This track solicits technical papers describing original, previously unpublished papers on trends, issues, and challenges of the Internet of Things, and sensor networks. You are invited to submit your research paper(s) related to the following topics of interest (but not limited to):

- 5G and beyond 5G/6G networks and IoT
- Protocols, architectures and applications for IoT
- Design space exploration techniques for IoT devices and systems
- Design principles and best practices for IoT application development
- IoT and Tactile Internet
- IoT and social networks
- IoT and AR/VR technologies
- Connected car, automotive, intelligent transportation
- IoT for smart manufacturing (industry 4.0) and smart spaces
- IoT protocols and standards (IPv6, 6LoWPAN, RPL, 6TiSCH, RAW, WoT, oneM2M, etc.)
- Low-power wide area networks and technologies
- Ultra-low power IoT technologies and embedded system architectures
- Distributed storage, data fusion for IoT
- Wearables, body sensor networks, smart portable devices
- Messaging technologies for the Industrial IoT (Google QUIC, DDS, AMQP, MQTT, MQTT-SN, etc.) and Factory of Things
- Aerial IoT networks
- Underwater and underground sensor and actuator networks
- IoT networks for smart cities, smart grids, smart living spaces, , Intelligent Transportation Systems, etc.
- Nano ad hoc, sensor and IoT networks
- RFID sensing technology
- Ambient intelligence
- Autonomic computing for IoT
- Software Defined Networking (SDN) and Network Function Virtualization (NFV) for IoT
- Artificial intelligence and machine learning for IoT
- IoT big data mining and analytics
- IoT large scale pilots and portability
- IoT interoperability and multi-platform integration
- Low-power computing
- Massive MTC (mMTC)
- Mobility, localization and context adaptive IoT
- Data aggregation and dissemination in multi-hop IoT networks
- Fog/edge computing and IoT: architectures and implementations
- Security, privacy, and trust issues in IoT networks
- Blockchain technology for IoT
- Age of Information
- Semantics-aware communications
- Modeling
- Performance evaluation
- Security
- Testbeds and real-world implementations

IMPORTANT DATES:

Deadline for paper submission: 11 October 2021

Date for notification: 18 January 2022

Deadline for final paper submission: 15 February 2022