



Call for Papers

IoT & Sensor Networks Symposium

Symposium Co-Chairs

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Scope and Motivation

Ad Hoc networks are highly adaptive and self-organizing networks that do not rely on pre-existing communication infrastructure. Following such a paradigm, sensor and actuator networks consist of multiple devices interacting with their physical environment while being, in most cases, sparsely distributed and needing to operate in an autonomic and energy-efficient manner. These networks have been the focus of interest of both academia and industry during the past two decades, given their large application scope both in the military and civilian fields. This interest is ever increasing now, with the gamut and diversity of sensors, devices and systems that are being connected to the Internet of Things (IoT). Indeed, IoT is transforming the way we live and work. Thanks to the increased connectivity, enabled by 5G, IoT will generate huge volumes of data that will have to be analyzed to uncover hidden patterns, correlations and other insights. Moreover, in the industrial environments as well as in smart spaces and connected cars, communications will require higher reliability, lower latency, and scalability. This anticipated high-traffic demands, low-latency and deterministic delivery requirements stemming from IoT can be met only with radical changes in terms of architecture and communication solutions.

The IoT & Sensor Networks Symposium at ICC 2021 aims to provide a forum that brings together scientists from various backgrounds to present their cutting-edge research achievements in all aspects of the field. This track solicits technical papers describing original, previously unpublished papers pertaining to trends, issues and challenges of the Internet of Things.

Topics of Interest

We invite submissions on a wide range of research topics, spanning both theoretical and systems research, including results from industry and academic/industrial collaborations, related but not restricted to the following topics:

- Protocols, Architectures and Applications for IoT
- Standardization for Ad Hoc, Sensor and IoT Networks

- Machine-to-Machine (M2M) Communications in Ad Hoc Networks and IoT
- Massive Machine Type Communications (MTC)
- Highly Reliable and Low Latency Ad Hoc, Sensor and IoT Networks
- QoS Provisioning for Ad Hoc, Sensor and IoT Networks
- IoT and Haptic Interfaces in Tactile Internet, including 5G Networks and beyond
- Low Power Wide Area Networks and Technologies
- Messaging Technologies for the Industrial IoT (Google QUIC, DDS, AMQP, MQTT, MQTT-SN, etc.)
- Vehicular Ad Hoc Networks
- Aerial IoT Networks
- Body Area Networks
- Underwater and Underground Sensor and IoT Networks
- IoT Networks for Smart Cities, Smart Grids, Smart Living Spaces, Industry 4.0, Intelligent Transportation Systems, etc.
- Delay-Tolerant Networks and Opportunistic Ad Hoc, Sensor, and IoT Networking
- Ultra-Wide Band Technology for Ad Hoc, Sensor and IoT Networks
- Nano Ad Hoc, Sensor and IoT Networks
- Software Defined Networking (SDN) and Network Function Virtualization (NFV) for IoT
- Cognitive Radio Networks in Ad Hoc, Sensor, and IoT Networks
- Co-existence Issues of Heterogeneous Ad Hoc, Sensor and IoT Networks
- MAC and Routing Protocols for Ad Hoc Networks, Sensor Networks
- Cross-layer Design in Ad Hoc and IoT Networks
- Energy-efficient Design for Green Ad Hoc, Sensor and IoT Networks
- Mobility, Localization and Context-Adaptive IoT
- Data Aggregation and Dissemination in Multi-hop and IoT Networks
- Machine Learning and/or Game Theoretical Models for Ad Hoc, Sensor and IoT Networks
- Fog/Edge Computing to IoT
- Security, Privacy and Trust issues in Wireless Ad Hoc, Sensor and IoT Networks
- Blockchain Technology for IoT
- Energy Saving, Power Control and Energy Scavenging for Ad Hoc, Sensor and IoT Networks
- Service Discovery for IoT
- Pricing, Modeling and Solutions for IoT
- Performance Evaluation and Modeling of Ad Hoc, Sensor and IoT Networks
- Experimental Prototypes and Testbeds for Ad Hoc, Sensor and IoT Networks

Important Dates

Paper Submission: 12 October 2020

Notification: 25 January 2021

Camera Ready and Registration: 22 February 2021

How to Submit a Paper

All papers for technical symposia should be submitted via [EDAS](#). Full instructions on how to submit papers are provided on the IEEE ICC 2021 website: <https://icc2021.ieee-icc.org/>