



#### Workshop Co-Chairs

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# IoT-SoS 2019

## 8th IEEE International Workshop on the *Internet of Things:* *Smart Objects and Services*

**June 10, 2019. Washington DC, USA**  
**co-located with IEEE WoWMoM 2019**

### Call for Papers

The Internet of Things (IoT) is shaping the evolution of the future Internet. According to the vision underlying the IoT, the next step in increasing the ubiquity of the Internet, after connecting people anytime and everywhere, is to connect inanimate objects. By providing objects with embedded communication capabilities and a common addressing scheme, a highly distributed and ubiquitous network of seamlessly connected heterogeneous devices is formed, which can be fully integrated into the current Internet and mobile networks, thus allowing for the development of new intelligent services available anytime, anywhere, by anyone and anything.

Many applications with high social and business impact fall under the IoT umbrella, including personal healthcare, smart grid, surveillance, home automation, intelligent transportation, while it is expected that new ones will emerge once the enabling technologies reach a stable state. At the moment, four of the most important challenges are:

- Architectures, protocols and algorithms for an efficient interconnection of smart objects, both between themselves and with the (future) Internet within the 5G context.
- The creation of value-added services in cross-domain applications, especially open and interoperable, enabled by the interconnection of things / machines / smart objects, in such a way that they can be integrated with current and new business and development processes.
- The support of a virtualized IoT based on the concepts of virtualized components and functions within dense and heterogeneous environments.
- Security, privacy and trust in the IoT applications, for ensuring that the provided services will protect the users' data, provide guarantees that no malicious users/devices will affect the system decisions and that the IoT applications will be secure and privacy-preserving by design.

Topics of interest include, but are not limited to:

- System architectures for the IoT
- Protocols and mechanisms for seamless IoT communications
- Modeling and simulation of large-scale IoT scenarios
- Enabling standards and technologies for the IoT
- Service platforms for IoT applications
- Business models and processes for IoT applications
- Energy optimization and sustainable operation of IoT devices
- Integration IoT with Cloud and Fog computing
- Emerging communication technologies for IoT, e.g. Low Power WAN and D2D
- Protocols and architectures for Industrial IoT
- Access network issues; including mobility management, data dissemination and routing
- Testbeds for the IoT
- Security, privacy and Trust in the IoT context
- Experiences with IoT system prototypes and pilots
- Novel and emerging IoT applications; including eHealth/mHealth, Smart Grid/Smart-Metering, Intelligent Transportation Systems, Smart House/Neighborhood/Cities
- Industrial use cases showing gaps to be filled by future research
- Ethical issues in the IoT applications
- Optimized and robust dynamic spectrum access on IoT
- System architectures for massive IoT

### Submission instructions

All submissions must describe original research, not published or currently under review for another workshop, conference, or journal. Submission implies the willingness of at least one author to attend the workshop and present the paper. Accepted papers will be included in the main proceedings of IEEE WoWMoM 2019 and published by IEEE.

You can find detailed submission instructions at <http://www.ing.unipi.it/iot-sos2019/submission.shtml>

### Important dates

Manuscript Submission Due: **March 11, 2019**

Notification of acceptance: **April 15, 2019.**

Final Manuscript Due: **April 29, 2019.**

### Contact information

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