

SPRITS

First international workshop on Semantic Processing and Reasoning for IoT Systems



A workshop hosted at the [IoT 2018 conference](#)

October 15-18 2018, Santa Barbara, California

Call for papers

Today, a very active community works at the crossroads of the Internet of Things and Semantic Web, to process sensor and environmental data and perform various application tasks. Data semantization is done as close to the physical appliances as possible, and processing these semantized data directly on the sensing devices or on their immediate infrastructure helps both gaining performance and saving energy. Given the recent advances on smart sensors, microcontrollers and network gateways, such processing is no longer limited to simple, well-defined procedures, but can now consist in heavier calculation tasks, such as semantic reasoning, leading to the possibility of distributing the composition of high-level and so-called “smart” things behaviors onto edge/fog setups.

This workshop aims at bringing together research and industry communities working on the different fields involved in implementing these distributed processing, such as edge computing, embedded processing, low-end/constrained devices, sensor data deduction, standard-based and open infrastructures for the Internet and Web of Things, etc. We expect contributions about the following - not limitative - list of topics:

- Semantic-based Data Fusion for multi-model sensor data
- Semantic Stream Processing for sensor data
- Semantic Storage and Query Processing for IoT and Web of Things data
- Distributed algorithms and platforms for Semantic Processing and Reasoning in the IoT
- Fog/Edge Computing paradigms and deployments on semantic-based IoT Data
- Reasoning Optimisation for low-end devices
- Edge/fog-based Reasoning

This workshop calls for contributions of two kinds: (1) research papers that report on novel research contributions addressing theoretical, analytical and empirical aspects of semantic processing and reasoning techniques in the Internet of Things. (2) in-use papers that demonstrate the use of semantic processing and/or reasoning in actual projects.

Submissions

Authors are invited to submit papers in any of these categories in a long (12 pages) or short (6 pages) [Springer LNCS](#) format.

Papers should be submitted on easychair at:

<https://easychair.org/conferences/?conf=sprints2018>

Accepted papers will be published on CEUR (<http://ceur-ws.org/>).

Important dates

- Submission deadline: August, 15
- Notification: September, 5
- Late Registration starts: September, 7
- Camera-ready papers: September, 20
- Workshop: during the conference (October, 15-18), precise date TBA

SPRITS Co-chairs

Lionel Médini, Université Claude Bernard Lyon 1, France

Frédérique Laforest, Université Jean Monnet, France

Maria Maleshkova, University of Bonn, Germany

Danh Le Phuoc, TU Berlin, Germany

Program Committee - To be extended

Sebastian Bader, Fraunhofer-Gesellschaft, Germany

Pierre-Antoine Champin - Université Claude Bernard Lyon 1, France

Kjetil Kjernsmo, Inrupt Inc., Norway

Maxime Lefrançois, Mines Saint-Étienne, France

Simon Mayer, Pro2Future GmbH, Austria

Alessandra Mileo, Dublin DCU, Ireland

Michaël Mrissa, Université de Pau et des Pays de l'Adour, France

Julien Subercaze, Université Jean Monnet, France

Tobias Weller, Karlsruher Institut für Technologie, Germany

Contact

sprits2018@easychair.org

More info at

<https://iot2018wt.github.io/sprits/>

