

### Important Dates

#### Deadline for abstracts:

April 27, 2020

#### Deadline for submissions:

May 4, 2020

#### Notification of authors:

May 25, 2020

#### Camera ready version:

June 1, 2020

### Programme Committee

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A recent forecast from the International Data Corporation (IDC) envisions that 41 billion Internet-of-Things (IoT) endpoints will be in use by 2025, representing great business opportunities. However, to unleash the full potential of IoT and flourishing innovations in application domains such as eHealth or smart city, it is critical to facilitate the creation and operation of IoT Systems. IoT systems are typically complex, large scale, distributed, and running in open context. Coordinated behavior across IoT, edge, and cloud infrastructures need to be managed. Besides, the trustworthiness of such systems is critical ranging from business critical to safety critical. The ability to continuously evolve and adapt these systems is decisive to ensure and increase their trustworthiness, quality, and user experience.

On the one hand, Model-Driven Engineering (MDE) techniques can support the development and operation of IoT systems. For instance, to manage abstractions in IoT systems definition and to provide means to automate some of the development and operation activities of IoT systems - e.g., domain-specific modeling languages can provide a way to represent different aspects of systems leveraging a heterogeneous software and hardware IoT infrastructure and to generate part of the software to be deployed on it. On the other hand, the application of modeling techniques in the IoT poses new challenges for the model-driven software development community. For instance, because IoT systems typically operate in a changing and often unpredictable environment, it is impossible to anticipate all the adaptations a system may face when operating. There is thus an urgent need for mechanisms to facilitate or automate the maintenance of IoT systems and ensure their trustworthiness.

### Topics

We are seeking contributions that reports research results or experiences on the application of model-driven techniques to all aspects related to the development and operation of IoT systems. The (non-holistic) list of topics of interest are as follows:

- Runtime models and operation of IoT systems
- Model-based Deployment and Orchestration IoT Systems
- Model-based Testing for IoT
- Relationships between physical and virtual models
- Simulation of physical systems and things
- DSLM for IoT systems
- Model-based analysis, verification and validation techniques.
- Trustworthiness of IoT systems.
- Integration of IoT, Fog, and Cloud Computing spaces.

### Submissions

The workshop participants will be selected based on their experience and ideas related to this topic. You are invited to apply for attendance by sending:

- a **full paper** (12 pages) on original research, lessons learned from realizing an approach,
- a **position paper** (6 pages) covering a well-argued vision or position,
- a **demonstration paper** (4 pages) to introduce research prototypes and operational systems which authors wish to share with the community.

All papers must conform to the Springer LNCS formatting guidelines: <http://www.springer.com/computer/lncs>.

### Organization

All accepted papers are invited to be accompanied with a poster. Please note that demonstrations papers are required to be accompanied by posters. The posters will be displayed through the whole workshop to foster discussion between the participants. A specific session will be dedicated to the demonstrations, possibly in the form of stands.