



You are invited to submit papers for the first online Eclipse Conference on Security, Artificial Intelligence, and Modeling for the next generation Internet of Things.

## Background

The adoption of the Internet of Things (IoT) is drastically increasing in every application domain, contributing to the rapid digitalization of contemporary society. Current IoT scenarios are characterized by constantly increasing demands in terms of non-functional requirements, from low latency to high reliability, dependability, and dynamic resources allocation. This paradigm shift, also considered as the next evolutionary phase of IoT, is expected to create numerous opportunities for the technology market supporting applications in multiple areas, i.e. Smart Factories, Smart Cities, Critical Infrastructures, Cooperative Service Robotics, etc. To cope with these demanding requirements, a multitude of novel technologies - such as Edge Computing, Artificial Intelligence and Analytics, Digital Twin, as well as Security, Privacy and Trust schemes – are being investigated in order to be adopted in current IoT architectures standards, identifying efficient integration schemes with proper design patterns. Hence, designing and managing the next generation of IoT-based systems is set to become even more complex.

## Call for Papers

The Eclipse SAM IoT conference will bring together industry experts and researchers working on the next generation IoT, especially focussing on Security and Privacy, Artificial Intelligence, and Modelling. You will be invited to present your results to participants from the research community, industry and standardisation bodies and to exchange ideas for future joint research activities. We welcome all submissions and do not require projects to be associated with the Eclipse Foundation or its projects. Final date for submissions is **July 22, 2020**. Selected papers will be published under the Creative Commons License 4.0 on [ceur-ws.org](http://ceur-ws.org).

The technical topics of interest include, but are not limited to the following three main areas.

Track 1: Security & Privacy for IoT	Track 2: AI for IoT	Track 3: Modelling for IoT
<ul style="list-style-type: none"> <li>IoT security protocols and architectures</li> <li>Anonymization techniques</li> <li>Trust and identity management</li> <li>Privacy data protection</li> <li>Secure discovery and authentication</li> <li>Access control for shared data and IoT devices</li> <li>Identification, assessment, and mitigation of cyber-physical threats</li> <li>Challenges, Use Cases, and Solutions for Industry and Society</li> </ul>	<ul style="list-style-type: none"> <li>Intelligent distributed architectures and infrastructures</li> <li>Autonomic Computing</li> <li>Distributed intelligence and multi-agent systems</li> <li>Context-Awareness and Location-Awareness</li> <li>Machine Learning and Deep Learning Approaches</li> <li>Adaptive Anomaly Detection and Predictive Maintenance</li> <li>AI, deep learning for predictive security</li> <li>Challenges, Use Cases, and Solutions for Industry and Society</li> </ul>	<ul style="list-style-type: none"> <li>Modelling Languages and Tools</li> <li>Verification &amp; Validation approaches</li> <li>Modelling for IoT Devices, Services, and Robotics</li> <li>Security &amp; Privacy modelling</li> <li>Statistical models checking</li> <li>Modelling adaptive IoT systems</li> <li>Runtime models</li> <li>Challenges, Use Cases, and Solutions for Industry and Society</li> </ul>

## Important Dates

Paper submission deadline:	Jul. 22, 2020
Acceptance Notification:	Aug. 10, 2020
Camera-Ready Paper Submission:	Aug. 30, 2020
Conference Dates:	Sept. 17-18, 2020

## Submission Guidelines

Final submissions must not substantially overlap papers previously or simultaneously submitted to a journal or a conference with proceedings. The contents should be written in English with a maximum paper length of eight (8) printed pages. More details will be available on the website by the last week in May. Papers must be submitted through EDAS.

The Eclipse Foundation reserves the right to exclude a paper from distribution after the conference, if the paper is not presented by the author at the conference.

## Technical Program Committee

The Program committee is an independent panel of expert volunteers and as such will do their best to judge papers objectively and on the principle of a level playing field for all.

We are inviting additional members to the Program Committee and welcome nominations from the community.

- Ilaria Bosi LINKS Foundation
- Paolo Brizzi Competence Center Industry Manufacturing 4.0
- Maria Teresa Delgado Eclipse Foundation
- Frederic Desbiens Eclipse Foundation
- Marco Jahn Eclipse Foundation
- Prabhakaran Kasinathan Siemens AG - Cybersecurity Technologies
- Mohammad Rifat Ahmmad Rashid University of Liberal Arts Bangladesh - ULAB
- Xu Tao LINKS Foundation

## Organizing Committee

### General Chairs

- Philippe Krief, Eclipse Foundation Europe
- Enrico Ferrera, LINKS Foundation

### Program Committee Chair

- Rosaria Rossini, LINKS Foundation

### Publicity

- Susan Iwai, Eclipse Foundation Europe

The **Eclipse SAM IoT 2020** conference is co-organized by the **Eclipse Foundation** ([eclipse.org/research](https://eclipse.org/research)) and the **LINKS Foundation** ([linksfoundation.com](https://linksfoundation.com)) and is supported by the **BRAIN-IoT** EU project ([brain-iot.eu](https://brain-iot.eu)).

## Contact us

If you have questions about the conference or the CFP, please contact [research@eclipse.org](mailto:research@eclipse.org).

Conference Website: <https://events.eclipse.org/2020/sam-iot>