CALL FOR PAPERS

Mark your calendars for Eclipse SAAM Mobility 2021, June 15-16. The virtual conference will bring together industry experts and researchers working on innovative software and systems solutions for the next generation of mobility, especially focusing on Security and Privacy, Artificial Intelligence, Architecture, Modelling and related challenges.

BACKGROUND

Increasingly autonomous, connected, intelligent and sustainable mobility in the future societies requires drastic software innovations that cross several research and innovation domains. This contributes to the rapid digitalization of contemporary societies. Current scenarios are characterized by constantly increasing demands of managing complex software constellations, rapid development cycles, while retaining high quality requirements for functional and non-functional requirements alike. A multitude of novel technologies – such as Edge Computing, Artificial Intelligence, Big Data Analytics, Digital Twins, and Security, Privacy, and Trust Schemes – are being investigated in order to be adopted in the current ecosystem-wide arrangements, standards, and tool chains. The role of open source software and tool chains, such as OpenADx, is also emerging powerfully. Hence, designing, managing, and governing the next generation systems, software and services for the future autonomous and connected mobility solutions is set to become even more complex.

TECHNICAL TOPICS

We encourage submissions that report on constructive, design-oriented research on innovative artefacts, such as software, models, and methods related to the conference theme. The conference is focused on, but not limited to the following Topics of Interest.

<table>
<thead>
<tr>
<th>Security and Privacy for Mobility</th>
<th>Architecture for Mobility</th>
<th>Artificial Intelligence for Autonomous Mobility</th>
<th>Modelling for Complex Mobility Systems and Services</th>
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<tr>
<td>● Security protocols, practices, and architectures</td>
<td>● Cloud- and edge computing architectures for autonomous driving and smart mobility applications</td>
<td>● Intelligent distributed architectures and infrastructures</td>
<td>● Modelling Languages and Tools</td>
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<td>● Privacy issues of smart and shared mobility</td>
<td>● In-vehicle software and computing platform architectures (e.g. AGL, Android Automotive etc.)</td>
<td>● Autonomic Computing</td>
<td>● Verification &amp; Validation approaches</td>
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<td>● Secure discovery and authentication</td>
<td>● In-vehicle sensors and instrumentation of the vehicles</td>
<td>● Distributed intelligence and multi-agent systems; Edge AI for mobility</td>
<td>● Modelling for mobility solutions</td>
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<td>● Access control and intellectual property rights for shared data and software resources</td>
<td>● Microservices, monitoring and scalability of mobility applications</td>
<td>● Context-Awareness and Location-Awareness</td>
<td>● Security &amp; Privacy modelling</td>
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<td>● Identification, assessment, and mitigation</td>
<td>● Service oriented architectures for mobility applications</td>
<td>● Machine Learning and Deep Learning Approaches</td>
<td>● Statistical models checking</td>
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<td>● of cyber-physical threats and safety issues of mobility</td>
<td>● Next generation connectivity for mobility applications (e.g. 5G and beyond)</td>
<td>● Adaptive Anomaly Detection and Predictive Maintenance</td>
<td>● Modelling adaptive IoT systems</td>
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<td>● Challenges, Use Cases, and Solutions</td>
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<td>● AI, deep learning for predictive security</td>
<td>● Runtime models</td>
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<td>● Challenges, Use Cases, and Solutions for Industry and Society</td>
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IMPORTANT DATES

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<th>Date</th>
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<td>Apr. 23, 2021</td>
<td>Paper submission deadline</td>
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<tr>
<td>May. 20, 2021</td>
<td>Acceptance Notification</td>
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<tr>
<td>Jun. 15-16, 2021</td>
<td>Conference Dates</td>
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SUBMISSION GUIDELINES

You are invited to submit papers for presentation 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 April 23, 2021. The papers will be peer-reviewed. Selected papers will be published under the Creative Commons License 4.0 on ceur-ws.org.

We encourage submissions of two types of papers: short papers (max 6 pages) and full research papers (max 12 pages) in accordance with the format recommendations below. A short paper can represent research-in-progress with initial or expected results, while a full research paper should report on results and discuss them in relation to the state-of-the-art. We encourage, regardless, a concise writing style. Papers must be written in a two-column format. It is strongly recommended to use the IEEE A4 templates that are available from the IEEE site.

All submissions must be in PDF format and must be submitted online to the EasyChair portal.

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.

- Karl Andersson, Luleå University of Technology
- Paolo Azzoni, EUROTECH
- Alessandra Bagnato, SOFTEAM
- Ahmad Bani Jamali, University of Oulu
- Christian Berger, Gothenburg University
- Benco Combermaë, University of Toulouse, INRIA
- Maria Teresa Delgado, Eclipse Foundation
- Marco Jahn, Eclipse Foundation
- Erik Kamsties, Fachhochschule Dortmund
- Teemu Karvonen, University of Oulu, M3S Group
- Markus Kelanti, University of Oulu, M3S Group
- Lukas Krawczyk, Fachhochschule Dortmund
- Karl-Heinz Krempels, Fraunhofer FIT / RWTH Aachen
- Zakaria Laaroussi, Ericsson
- Lucy Ellen Lwakatare, University of Helsinki
- Yod Samuel Martin, University of Madrid
- Ralph Mueller, Eclipse Foundation
- Tero Päivärinta, University of Oulu, M3S Group
- Ella Peltonen, University of Oulu, UBICOMP
- Ivana Podnar-Zarko, University of Zagreb
- Sowmya Ravidas, TU Eindhoven
- Jan-Philipp Steghoefer, Gothenburg University
- Sasu Tarkoma, University of Helsinki
- Burak Turhan, University of Oulu, M3S Group
- Alexander Viehl, FZI Forschungszentrum Informatik

CONFERENCE CO-CHAIRS

- Pasi Kuvaja, Professor Emeritus, University of Oulu, M3S Group, Finland
- Philippe Krief, Eclipse Foundation Europe, France

The Eclipse SAAM Mobility 2021 conference is co-organized by the Eclipse Foundation and the University of Oulu.

CONTACT US

If you have questions about the conference or the CFP, please contact research@eclipse.org.

Conference Website: events.eclipse.org/2021/saam-mobility

SAAM Mobility CFP V 1.9.1 - 14.04.21