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.

CALL FOR PAPERS

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 16 April 2021. The papers will be peer-reviewed. Selected papers will be published under the Creative Commons License 4.0 on ceur-ws.org.

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.

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

IMPORTANT DATES

Paper submission deadline:	Apr. 16, 2021
Acceptance Notification:	May. 20, 2021
Conference Dates:	Jun. 15-16, 2021

SUBMISSION GUIDELINES

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.

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
- Alessandra Bagnato, SOFTEAM
- Ahmad Bani Jamali, University of Oulu
- Christian Berger, Gothenburg University
- Marco Jahn, Eclipse Foundation
- Teemu Karvonen, University of Oulu, M3S Group
- Lukas Krawczyk, FH Dortmund
- Markus Kelanti, University of Oulu, M3S Group
- Zakaria Laaroussi, Ericsson
- Tero Päivärinta, University of Oulu, M3S Group
- Ella Peltonen, University of Oulu, UBICOMP
- 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