## 8<sup>th</sup> OMNeT++ Community Summit 2021

Virtual Summit - September 8-10, 2021

## CALL FOR CONTRIBUTIONS

http://summit.omnetpp.org/2021

OMNeT++ is a public-source, component-based, modular and open-architecture simulation environment with strong GUI support and an embeddable simulation kernel. It is designed to simulate diverse discrete event-based systems.

The OMNeT++ Community Summit is an open meeting with time and space for tutorials, discussions, coding sessions as well as presentations on recent developments and novel ideas in the broad area of modeling and simulation, with a focus on the OMNeT++ simulation framework. The OMNeT++ Community Summit unites users, developers, and researchers to discuss applications, developments, and ideas on the topics of integrating simulation models, coupling different simulation tools and providing more accurate and more efficient modeling approaches and simulation models.

To facilitate the interaction among participants, the summit employs a highly interactive presentation format called ConversTation, which provides much more feedback and useful discussion time than traditional talks. More information will be provided to presenters and audience at a due time.

Following the success of previous editions, the 2021 Community Summit will include a hackathon event. This provides the chance for developers of simulation models and frameworks to consult OMNeT++ core developers and fellow developers, to improve the quality and interoperability of models and frameworks.

Scientific contributions will be reviewed by the technical program committee and (if accepted and presented at the summit) will be included in the proceedings, which will be published in arXiv. The submission copyright will be retained by the authors.

Topics of interest include, but are not limited to:

- Design, evaluation, validation of simulation models
- Simulation credibility and validation
- Modeling techniques, including stochastic and hybrid modeling
- Comparison/integration with other simulation/emulation tools
- Parallel simulation and simulation control
- Integration of hardware-specific code

- Simulative approaches to performance evaluation
- Cross-layer protocol or system design methodologies
- Use of discrete event simulation in other domains
- Result interpretation and analysis
- Simulation in the loop
- Industrial applications and practical use cases

## SUBMISSION AND PARTICIPATION

We invite researchers and users alike to submit one or more of the following contribution types:

- a) Scientific contributions (up to 8 pages) are full research papers that describe ongoing work or finalized results. Full papers that are reviewed and accepted by the TPC and presented at the summit will appear in the summit proceedings that are published in arXiv.
- b) Short abstracts (up to 3 pages) provide overviews of a proposed presentation or demonstration. Authors may find this format suitable for design proposals, for preliminary or more narrowly focused work, for case studies, or to highlight OMNeT++-related results in work that has been published elsewhere. Short abstracts will be invited as either a presentation, as a demonstration, or a poster and will be published on the summit website.
- c) Hackathon proposal abstracts (up to 1 page) propose a topic for a hackathon. This can be the optimization of an ongoing OMNeT++ project, porting of frameworks to the newest OMNeT++ and INET versions, and many more. They should be submitted via e-mail to the organizers (omnetsummit2021@easychair.org). Specific "call for hackathons" including detailed instructions will be distributed separately and made available on the summit website.
- d) Proposals for tutorials, demonstrations, coding sessions, discussion panels, and other interactive community activities can be submitted via e-mail to the organizers (omnetsummit2021@easychair.org).

All submissions should be of interest to the OMNeT++ community. We welcome case studies that employ OMNeT++ in the evaluation of systems as well as contributions addressing general questions of OMNeT++-based simulations. For model-centric submissions, we encourage the author(s) to publicize source code at the time of submission. Proposals for individual contributions will be invited depending on the submission type and based on the expected interest for the OMNeT++ community. Contributions should be prepared according to the submission guidelines provided in arXiv. Detailed instructions are available on the summit website.

The 2021 Community Summit is sponsored and free to attend by everyone. Registration or publication fees will not be applied.

**DATES and DEADLINES** 

**Submission Deadline:** July 15, 2021 Camera-Ready: August 16, 2021 **Author Notification:** August 2, 2021 **Hackathon + Summit** (to be confirmed): September 8-10, 2021

**ORGANIZERS** 

Virtual Summit Organizer **Technical Program Organizers**  **Hackathon Organizer** 

Asanga Udugama (University of Bremen)

Rudolf Hornig (OpenSim Kft.) Marcel Marek (Brno University of Technology) Giovanni Nardini (University of Pisa)

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