

23 – 24 September 2024 Linz, Austria

About

Digital Twins (DTs) have emerged over the last decade as a key technology to better understand, use, monitor, and improve systems in a broad range of application domains, including agriculture, automotive, avionics, construction, health care, manufacturing, smart cities, and many more. DTs are based on the use of data and models, and their development requires the integration of different technologies for diverse purposes, including design-space exploration, virtual commissioning, and behavior optimization. Their development is a multi-disciplinary process that requires the collaboration of experts from different disciplines and application domains. This includes software engineers at the core of the DT engineering process to architect, develop, deploy, test, evolve, and validate the DT software, but also engineers from other engineering disciplines with domain expertise in the specific aspects of the DTs. Even though the use of DT is growing at a fast pace, their development is still generally conducted in an ad hoc manner. The lack of systematic frameworks and approaches represents a main obstacle to the rapid and scalable development of industrial DTs.

The International Conference on Engineering DTs (EDTconf) aims to bring together researchers and practitioners on DTs, from both academia and industry, and from different engineering disciplines and application domains to shape the future of systematically designing, developing, deploying, evolving, maintaining, and validating DTs.

Topics of Interest

Topics of interest include, but are not restricted to:

- Modelling concepts and languages, methods, and tools for developing DTs
- Model consistency, management, and evolution of engineering models
- DT modeling, simulation, and co-simulation of CPS
- Quality assurance for and evaluation of DTs
- DTs for DevOps / DevOps for DTs
- Deployment and operation of DTs
- Uncertainty and fidelity in DTs
- Architectural patterns for DTs
- DT reliability, trust, and security
- Combining models and data in DTs
- Teaching and education of DT skills
- Virtual commissioning based on DTs
- DTs for dynamic (re)configuration and optimization
- DTs for continual learning and continuous improvement
- Case studies, experience reports, comparisons in application domains

Submission Page Limits

Maximum 10 + 2 pages Regular paper

Short papers 4 - 6 pages **Tool demonstration papers** 2 - 4 pages **Exemplar papers** 4 - 6 pages

Paper Publication

Accepted regular papers, short papers, tool demonstration papers, and exemplar papers will be published in the companion proceedings of the MODELS 2024 conference.

Selected regular papers from the EDTconf conference will be invited to revise and submit an extended version of the papers for publication in a dedicated special section in the Journal on Software and Systems Modeling (SoSyM). Selected papers will be expected to comply with the standard guidelines of SoSyM when publishing an extended version of a paper, including the addition of at least 30% new material.

More Information

www.edtconf.org



info@edtconf.org

Sponsors





Important Dates

Wed. June 19, 2024 Abstract submission 24, 2024 Paper submission Mon. June

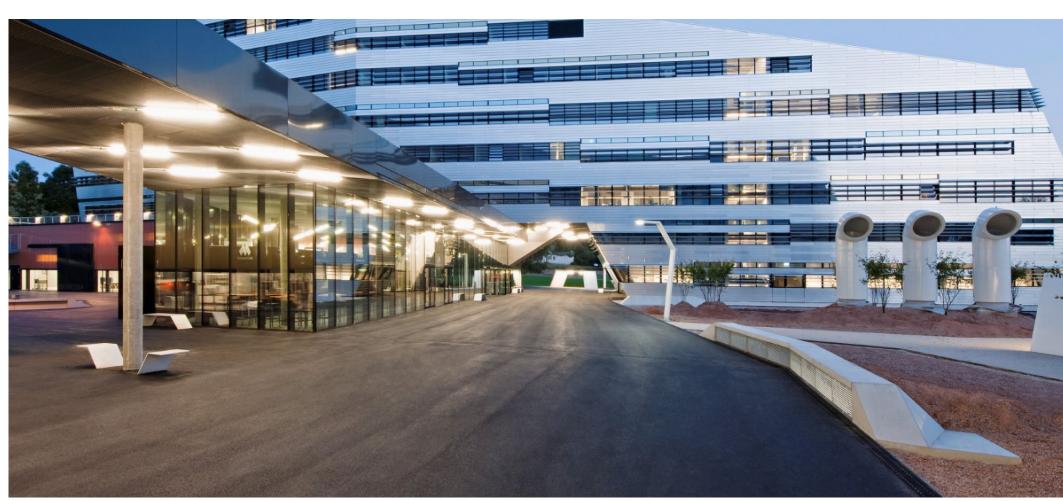
29, 2024 Notification of acceptance Mon. July 19, 2024 Camera-ready submission Mon. August

Venue

Co-located with MODELS 2024

www.modelsconference.org





Organizing Committee



Loek Cleophas General and PC Chair TU/e Eindhoven, NL Stellenbosch Uni., ZA



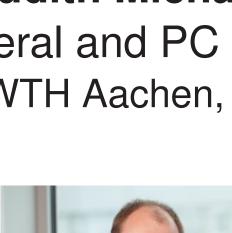
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