EDTconf
International Conference on Engineering Digital Twins

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

Regular paper	Maximum 10 + 2 pages
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.

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.
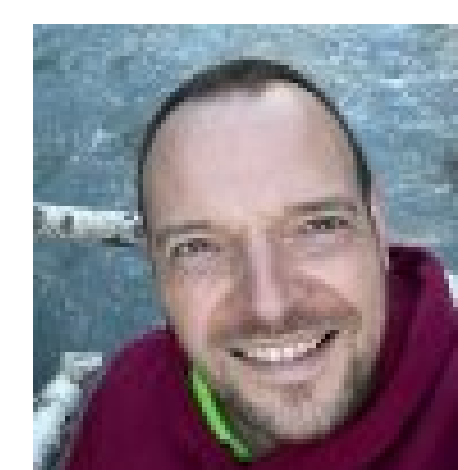
More Information

www.edtconf.org

info@edtconf.org

Supporters

acm

IEEE
Advancing Technology for Humanity

Important Dates

Wed.	**June**	**19,**	**2024**	Abstract submission
Mon.	**June**	**24,**	**2024**	Paper submission
Mon.	**July**	**29,**	**2024**	Notification of acceptance
Mon.	**August**	**19,**	**2024**	Camera-ready submission

Venue

Co-located with **MODELS 2024**

www.modelsconference.org

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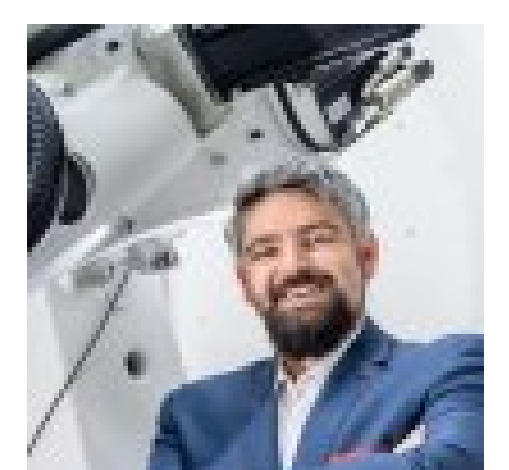JOHANNES KEPLER
UNIVERSITÄT LINZ

Organizing Committee

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General and PC Chair
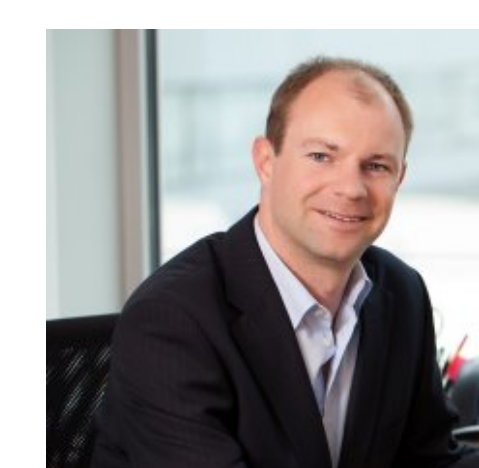TU/e Eindhoven, NL
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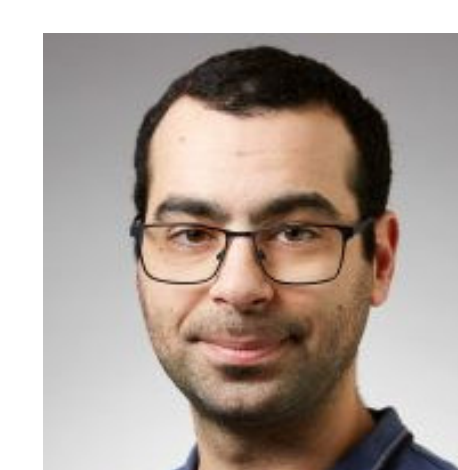General and PC Chair
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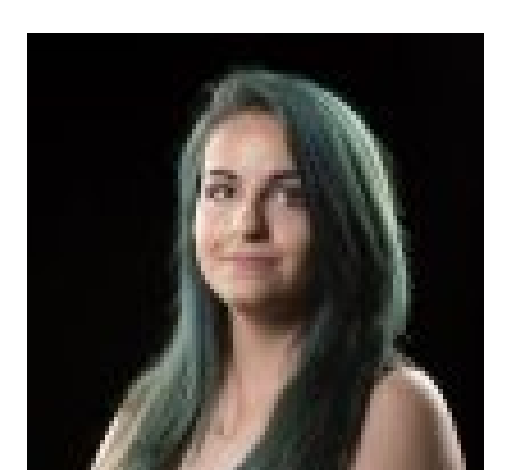German Aerospace
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