

# MODELS 24

22 - 27 September 2024  
Linz, Austria

MODELS is the premier conference series for model-based software and systems engineering. Since 1998 MODELS has covered all aspects of modeling, from languages and methods to tools and applications. Attendees of MODELS come from diverse backgrounds, including researchers, academics, engineers, and industrial professionals. This year's edition will be hosted at the Johannes Kepler University Linz, Austria and will provide an opportunity for the modeling community to further advance the foundations of modeling, and come up with innovative applications of modeling in emerging areas of cyber-physical systems, socio-technical systems, machine learning, security, sustainability, ...

## IMPORTANT DATES

<b>March 21</b> Abstract submission	<b>March 28</b> Full paper submission	<b>May 27-29</b> Author response	<b>June 17</b> Notification	<b>July 31</b> Camera ready	<b>September 22-27</b> Conference
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MODELS 2024 offers two tracks for submitting papers, *Foundations Track* and *Practice Track*, on topics related to modeling for software and systems engineering including:

- Fundamentals of model-based engineering (definition of syntax and semantics of modeling languages and model transformation languages)
- New paradigms, formalisms, applications, approaches, frameworks, or processes for model-based engineering, e. g., low-code, digital twins, etc.
- Model-based generative and re-engineering
- Model-based monitoring, analysis, and adaptation
- Development of model-based systems engineering approaches and modeling-in-the-large, incl. interdisciplinary engineering and coordination
- Applications of AI to model-related engineering problems, e.g., search, machine learning, large language models (AI for modeling)
- Model-based engineering foundations for AI-based systems (modeling for AI)
- Human and organizational factors in model-based engineering
- Tools, meta-tools, and language workbenches for model-based engineering, incl. model management and scalable model repositories
- Hybrid multi-modeling, i.e., integration of modeling languages/tools
- Evaluation/comparison of modeling languages, techniques, and tools
- Quality assurance (analysis, testing, verification, fidelity assessment) for (non-)functional properties of models and model transformations
- Collaborative modeling (cloud-based) to address team management issues
- Evolution of modeling languages and related standards
- Modeling education, e.g., delivery methods and curriculum design
- Modeling in software engineering, e.g., applications of models to address software engineering challenges
- Modeling for specific challenges such as collaboration, scalability, security, interoperability, adaptability, flexibility, maintainability, reuse, dependability, energy efficiency, sustainability, and uncertainty
- Modeling with, and for, novel systems and paradigms such as security, CPS, IoT, cloud computing, DevOps, blockchain, data science, machine learning, systems engineering, socio-technical systems, robotics, mobile applications, conversational agents, open-source software, ...
- Empirical studies on model-based engineering, e.g., in smart manufacturing, cities, enterprises, mobility, society, etc.

### SUBMISSION

#### Foundations Track

- Technical papers (up to 10 pages + 2 for references only)
- New ideas and vision papers (6+2 pages for short, 10+2 pages for full papers)

#### Practice Track

- Technical papers (10+2 pages)

### SoSyM SPECIAL ISSUE

Selected best papers will be invited to the *Int. Journal on Software and Systems Modeling*

### PC CO-CHAIRS

- **Marsha Chechik**  
(University of Toronto)  
Foundations Track
- **Benoit Combemale**  
(University of Rennes)  
Practice Track

More information: [www.modelsconference.org](http://www.modelsconference.org)