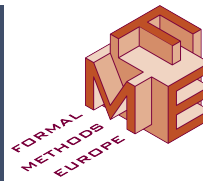# FormaliSE 2024

12th International Conference on
Formal Methods in Software Engineering
April 14-15, 2024, Lisbon, Portugal, co-located with ICSE 2024
https://formalise2024.github.io

Call for Papers

Historically, formal methods academic research and practical software development have had limited mutual interactions — except possibly in specialized domains such as safety-critical software. In recent times, the outlook has considerably improved: on the one hand, formal methods research has delivered more flexible techniques and tools that can support various aspects of the software development process — from user requirements elicitation, to design, implementation, verification and validation, as well as the creation of documentation. On the other hand, software engineering has developed a growing interest in rigorous techniques applied at scale.

The FormaliSE conference series promotes work at the intersection of the formal methods and software engineering communities, providing a venue to exchange ideas, experiences, techniques, and results. We believe more collaboration between these two communities can be mutually beneficial by fostering the creation of formal methods that are practically useful and by helping develop higher-quality software.

Originally a workshop event, since 2018 FormaliSE has been organized as a conference co-located with ICSE. The 12th edition of FormaliSE will also take place as a co-located conference of ICSE 2024.

Topics

Area of interest (include but are not limited to):
- requirements formalization and formal specification;
- approaches, methods, and tools for verification and validation;
- formal approaches to safety and security related issues;
- analysis of performance and other non-functional properties based on formal approaches;
- scalability of formal method applications;
- integration of formal methods within the software development lifecycle;
- model-based engineering approaches;
- correctness-by-construction approaches for software and systems engineering;
- application of formal methods to specific domains (such as, autonomous, cyber-physical, intelligent, and IoT systems);
- formal methods for AI-based systems, and AI applied in formal method approaches;
- formal methods for certification;
- guidelines to use formal methods in practice;
- usability of formal methods.

Paper Submission and Publication

We invite you to submit:

Full research papers (up to 10 pages excluding references) describing original research work and results. We encourage authors to include validation of their contributions by means of a case study or experiments. We also welcome research papers focusing on tools and tool development.

Case study papers (up to 10 pages excluding references) discussing a significant application that suggests general lessons learned and motivates further research, or empirically validates theoretical results (such as a technique's scalability).

Research ideas papers (up to 4 pages excluding references) describing new ideas in preliminary form, in a way that can stimulate interesting discussions at the conference, and suggest future work.

All papers submitted to the FormaliSE 2024 must be written in English, must be unpublished original work, and must not be under review or submitted elsewhere at the time of submission. Submissions must be in PDF format, conform to the ACM Primary Article Template and comply with the FormaliSE's lightweight double-anonymous review process.

Submissions to FormaliSE 2024 can be made via HotCRP (https://formalise24.hotcrp.com) by the deadline. We encourage authors to submit also artifacts for their papers. Each paper will be reviewed by at least three PC members that judge the paper based on its soundness, significance, novelty, verifiability, and presentation clarity. Artifacts will be evaluated by the artifact evaluation committee. This evaluation will not affect the paper's acceptance decision, but reviewers will know whether a paper has submitted any artifacts. All accepted papers are published as part of the ICSE 2024 Proceedings in the ACM and IEEE Digital Libraries. One author of each accepted paper is required to register and present the paper.

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IMPORTANT DATES

Abstract Submission:	01 December 2023
Paper Submission:	08 December 2023
Notification:	12 January 2024
Camera-ready:	28 January 2024