

Message from the Chairs of FormaliSE 2019

Welcome to **FormaliSE 2019**, the 7th International Conference on Formal Methods in Software Engineering. FormaliSE is a yearly conference on Formal Methods in Software Engineering. (<https://www.formalise.org/>). It is organized by FME (Formal Methods Europe). FormaliSE is co-located with ICSE (International Conference on Software Engineering) 2019 (<https://conf.researchr.org/home/icse-2019>).

The software industry has a long-standing and well-earned reputation for failing to deliver high-quality software. Much progress has been achieved from the early days of software development; still, nowadays, even considering the state of the art of the technologies used, the success of software projects is often not guaranteed. Many of the approaches used for developing large, complex software system are still not able to ensure the correct behavior -- and the general quality -- of the delivered product, despite the efforts of the (often very qualified and skilled) software engineers involved. This is where formal methods can play a significant role. Indeed, they have been developed to provide the means for greater precision and thoroughness in modeling, reasoning about, validating, and documenting the various aspects of software systems during their development. When carefully applied, formal methods can aid all aspects of software creation: user requirement formulation, design, implementation, verification/testing, and the creation of documentation.

However, after decades of research, and despite significant advancement, formal methods are still not widely used in industrial software development. We believe that a closer integration of formal methods in software engineering can help increase the quality of software applications, and at the same time highlight the benefits of formal methods in terms also of the generated return on investment (ROI).

The main objective of the conference is to foster the integration between the formal methods and the software engineering communities, to strengthen the -- still too weak -- links between them, and to stimulate researchers to share ideas, techniques, and results, with the ultimate goal to propose novel solutions to the fraught problem of improving the quality of software systems.

FormaliSE received 40 high-quality submissions. Each submission went through a thorough reviewing process, with each paper receiving three reviews by experts in the field. After an intense discussion, we accepted 11 full and 2 research ideas papers. Consequently, the acceptance rate was around 28% considering only full papers (33%, including also research ideas papers).

The program features a keynote and paper presentations. Dr. Jeff Joyce (Critical System Labs Inc.) will give the keynote, titled "The Benefits of (having doubts about) Formal Methods".

We would like to thank all authors for submitting papers, and the Program Committee members and their subreviewers for their help in the selection process. We would also like to thank the members of the ICSE Organizing Committee, especially the General Chair Joanne Atlee, Co-located Events Chair Daniel Amyot, and Proceedings Chairs Jianwei Niu and Xiaoyin Wang.

Enjoy the conference!

General Co-Chair

Stefania Gnesi
ISTI-CNR, Italy

General Co-Chair

Nico Plat
Thanos, The Netherlands

Program Co-Chair

Nancy Day
University of Waterloo, Canada

Program Co-Chair

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