

# Message from the Chairs of FormaliSE 2020

Welcome to **FormaliSE 2020**, the 8th 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) 2020 (<https://conf.researchr.org/home/icse-2020>).

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 systems are still not able to ensure the correct behaviour — 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.

After decades of research though, 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 41 submissions; two submissions were desk-rejected for violation of formatting requirements. Each submission went through a thorough reviewing process, with each paper receiving at least three reviews by experts in the field. Based on the reviews and intense discussions, the program committee decided to accept 14 papers. Consequently, the acceptance rate was around 36%.

The program features two keynotes and paper presentations. Dr. Shahar Maoz (Tel Aviv University, Israel) will give the keynote titled “Synthesis Technologies for Reactive Systems Software Engineers”; Dr. Corina Pasareanu (Carnegie Mellon University Silicon Valley & NASA Ames Research Center, USA) will give the keynote titled “On the Probabilistic Analysis of Neural Networks”.

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 chairs Gregg Rothermel and Doo-Hwan Bae, the Co-located Events chairs Steve Cha, Jang-Eui Hong, Byungjeong Lee, and the Proceedings Chairs William G.J. Halfond and René Just.

*Enjoy the conference!*

## **General Co-Chair**

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## **General Co-Chair**

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