Message from the Chairs

This volume contains the proceedings of the 15th ACM-IEEE International Conference on Formal Methods and Models for System Design (MEMOCODE 2017). MEMOCODE’s objective is to bring together researchers and practitioners interested in formal methods and models for system design and development to exchange ideas, research results, and lessons learned. System design covers the design and development of hardware, firmware, middleware, and application software for systems ranging from single embedded devices to highly networked CPS and systems in the internet of things (IoT).

As in previous MEMOCODE conferences, the objective of MEMOCODE 2017 is to emphasize the importance of formal models and methods in correct system design in all aspects of computer system development. In particular, MEMOCODE focuses on research contributions and formal foundations, engineering methods, tools, and experimental case studies.


MEMOCODE 2017 will take place in Vienna, Austria and is again co-located with FMCAD as in many previous years. It shares three tutorials with FMCAD held by Shin’ichiro Matsuo (MIT Media Lab/CELLOS Consortium/BSafe.network), Cas Cremers (Oxford University), and Jade Alglave (University College London/Microsoft Research).

There have been 48 submissions of authors from USA (31), Germany (26), France (13), United Kingdom (10), Austria (10), China (8), New Zealand (5), Morocco (4), India (4), Pakistan (3), Finland (3), Italy (3), Bulgaria (2), Israel (2), Australia (2), Sudan (2), Taiwan (2), Algeria (2), Turkey (1), Brazil (1), Singapore (1), and Sweden (1). All papers have been carefully reviewed with between three and six reviews per paper, which lead to active discussions amongst the reviewers. The program committee finally decided to accept 15 strong technical contributions as regular papers and seven short papers reporting preliminary results. These selected papers will be presented at the conference. This lead to an acceptance rate of 31% for regular papers and 45% considering all papers. In addition to the paper presentations and the tutorials, the conference has three outstanding keynotes held by Alessandro Abate (University of Oxford), Franz-Josef Grosch (Robert Bosch GmbH), and Thomas Henzinger (IST Austria) (see the abstracts in the proceedings).

We extend our sincerest thanks to the organizing committee, the program committee, and the subreviewers who generously volunteered their time and expertise to make this conference a success. That so many busy and talented people have taken the time to help with the organization of the conference and the formation of its technical program speaks well for the future of MEMOCODE and for formal methods in system design.

We thank the FMCAD General Chair, Georg Weissenbacher, for his invaluable help in organizing the conference in Vienna. We are also grateful to Yi Deng, our Publication Chair, for producing the conference proceedings. We wish to express our gratitude to the MEMOCODE sponsors: ACM, IEEE, IEEE Council on Electronic Design Automation, and the IEEE Circuits and Systems Society, for renewing the Conference’s memorandum of understanding until 2021. We sincerely hope that you enjoy and benefit from the MEMOCODE 2017 program.

Jean-Pierre Talpin
General and Finance Chair

Patricia Derler and Klaus Schneider
Program Committee Co-Chairs