

Preface

The International Conference on Formal Engineering Methods (ICFEM) is a premier conference for research in all areas related to formal engineering methods, such as verification and validation, software engineering, formal specification and modeling, software security, and software reliability. Since 1997, ICFEM has been serving as an international forum for researchers and practitioners who have been seriously applying formal methods to practical applications. Researchers and practitioners, from industry, academia, and government, are encouraged to attend, present their research, and help advance the state of the art. We are interested in work that has been incorporated into real production systems, and in theoretical work that promises to bring practical and tangible benefit.

In recent years, ICFEM has taken place in Paris, France (2015), Luxembourg (2014), Queenstown, New Zealand (2013), Kyoto, Japan (2012), Durham, UK (2011) and Shanghai, China (2010). The 18th edition of ICFEM took place in Tokyo during November 16–18, 2015. The Program Committee (PC) received 64 full research papers. Each paper received at least three reports from PC members or external reviewers. On the basis of these reports, each submission was extensively discussed in the virtual meeting of the PC, and the PC decided to accept 27 papers. The proceedings also include a full paper and two short summary papers from the three keynote speakers, Tom Maibaum (McMaster University), W. Eric Wong (University of Texas at Dallas), and Keijiro Araki (Kyushu University).

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The main event was preceded by three workshops and a tutorial: the 5th International Workshop on Formal Techniques for Safety-Critical Systems (FTSCS 2016), the 6th International Workshop SOFL+MSVL, the Workshop on Formal and Model-Driven Techniques for Developing Trustworthy Systems, and a one day tutorial on formal specification and verification with CafeOBJ.

We would like to thank the numerous people who contributed to the success of ICFEM 2016: the Steering Committee members, the PC members and the additional reviewers for their support in selecting papers and composing the conference program, and the authors and the invited speakers for their contributions without which, of course, these proceedings would not exist. We would like also to thank Springer for

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