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Antonio Cerone · Marco Roveri (Eds.)

Software Engineering and Formal Methods

SEFM 2017 Collocated Workshops:
DataMod, FAACS, MSE, CoSim-CPS, and FOCLASA
Trento, Italy, September 4–5, 2017
Revised Selected Papers

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Preface

This volume contains the technical papers presented at the five workshops collocated with the 15th International Conference on Software Engineering and Formal Methods (SEFM 2017). The workshops took place at the Fondazione Bruno Kessler, Trento, Italy, during September 4–5, 2017.

The SEFM 2017 conference brought together leading researchers and practitioners from academia, industry, and government, to advance the state of the art in formal methods, to facilitate their uptake in the software industry, and to encourage their integration within practical software engineering methods and tools. The satellite workshops provided a highly interactive and collaborative environment to discuss emerging areas of software engineering, software technologies, model-driven engineering, and formal methods.

The five workshops whose papers are included in this volume are:

- **DataMod 2017** – 6th International Symposium From Data to Models and Back September 4–5, 2017. Organized by: Vashti Galpin (University of Edinburgh, UK), Paolo Milazzo (Università di Pisa, Italy), and André Teixeira (Delft University of Technology, The Netherlands).
- **FAACS 2017** – First Workshop on Formal Approaches for Advanced Computing Systems, September 4, 2017. Organized by: Paolo Arcaini (Charles University, Czech Republic), Marina Mongiello (Politecnico di Bari, Italy), Elvinia Riccobene (Università degli Studi di Milano, Italy), and Patrizia Scandurra (University of Bergamo, Italy).
- **MSE 2017** – First Workshop on Microservices: Science and Engineering, September 4, 2017. Organized by: Marcello M. Bersani (Politecnico of Milan, Italy), Antonio Bucchiarone (FBK, Italy), Nicola Dragoni (Technical University of Denmark and Örebro University, Sweden), Luca Ferrucci (ISTI-CNR, Pisa, Italy), Manuel Mazzara (Innopolis University, Russia), and Fabrizio Montesi (University of Southern Denmark).
- **CoSim-CPS 2017** – First Workshop on Formal Co-Simulation of Cyber-Physical Systems, September 5, 2017. Organized by: Cinzia Bernardeschi (University of Pisa, Italy), Peter Gorm Larsen (Aarhus University, Denmark), and Paolo Masci (Universidade do Minho, Portugal).
- **FOCLASA 2017** – 15th International Workshop on Foundations of Coordination Languages and Self-Adaptive Systems, September 5, 2017. Organized by: Carlos Canal (University of Malaga, Spain) and Gwen Salaün (University of Grenoble Alpes, France).

We would like to thank each organizer of the five workshops at SEFM 2017 for the interesting topics and resulting talks, as well as the respective Program Committee members and external reviewers who carried out thorough and careful reviews, created the program of each workshop, and made the compilation of this high-quality volume

possible. We also thank the paper contributors and attendees of all workshops. We would like to extend our thanks to all keynote speakers for their excellent presentations. A special thanks goes to Annalisa Armani and to all the other members of the Ufficio Eventi of FBK, who largely contributed to the success of the SEFM 2017 conference and workshops. We also thank the developers and maintainers of the EasyChair conference management system, which was of great help in handling paper submission, reviewing, discussion, for all workshops, and in the preparation of this volume. Finally, we would like to thank the organizers of SEFM 2017, Alessandro Cimatti and Marjan Sirjani, for useful insights and discussions, as well as the Fondazione Bruno Kessler that hosted the workshops and the conference.

November 2017

Antonio Cerone
Marco Roveri

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