

## Preface

This volume contains the technical papers presented at the eight workshops collocated with the 2018 edition of the STAF (Software Technologies: Applications and Foundations) federation of conferences on software technologies. The workshops took place at ENSEEIHT (National Higher School of Engineering in Electrical Engineering, Hydraulics, and Digital Sciences) in Toulouse, France, during June 25-29, 2018.

The STAF 2018 conferences and workshops brought together leading researchers and practitioners from academia and industry to advance the state of the art in practical and foundational advances in software technology. They address all aspects of software technology, from object-oriented design, testing, mathematical approaches to modelling and verification, transformation, model-driven engineering, aspect-oriented techniques, 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 eight workshops whose papers are included in this volume are:

- **CoSim-CPS 2018** – 2nd International Workshop on Formal Co-Simulation of Cyber-Physical Systems, June 26, 2018. Organizers: Cinzia Bernardeschi (Dept of Information Engineering, University of Pisa, Italy), Peter Gorm Larsen (Aarhus University, Denmark), and Paolo Masci (HASLab/INESC TEC and Universidade do Minho, Portugal).
- **DataMod 2018** – 7th International Symposium "From Data to Models and Back", June 25-26, 2018. Organizers: Antonio Cerone (Department of Computer Science, Nazarbayev University, Kazakhstan), Riccardo Guidotti (KDDLab, ISTI-CNR, Pisa, Italy), and Oana Andrei (University of Glasgow, United Kingdom).
- **FMIS 2018** – 7th International Workshop on Formal Methods for Interactive Systems, June 25-26, 2018. Organizers: Yamine Aït Ameur (IRIT, Université de Toulouse, France), and Philippe Palanque (IRIT, Université de Toulouse, France).
- **FOCLASA 2018** – 16th International Workshop on Foundations of Coordination Languages and Self-adaptative Systems, June 26, 2018. Organizers: Jean-Marie Jacquet (University of Namur, Belgium), and Jacopo Soldani (University of Pisa, Italy).
- **GCM 2018** – 9th International Workshop on Graph Computation Models, June 27, 2018. Organizer: Hans-Jörg Kreowski (Universität Bremen, Germany).
- **MDE@DeRun 2018** – Model-Driven Engineering for Design-Runtime Interaction in Complex Systems, June 28, 2018. Organizers: Hugo Bruneliere (IMT Atlantique & LS2N, Nantes, France), Romina Eramo (University of L'Aquila, Italy), and Abel Gomez (Universitat Oberta de Catalunya, Spain).

- **MSE 2018** – 3rd International Workshop on Microservices: Science and Engineering, June 25, 2018. Organizers: Antonio Bucchiarone (Fondazione Bruno Kessler, Trento, Italy), Sophie Ebersold (IRIT, Université de Toulouse, Toulouse, France), and Florian Galinier (IRIT, Université de Toulouse, Toulouse, France).
- **SecureMDE 2018** – 1st International Workshop on Security for and by Model-Driven Engineering, June 25, 2018. Organizers: Salvador Martinez (CEA-LIST, LISE laboratory, Paris, France), Jordi Cabot (SOM Research Lab, ICREA-UOC, Barcelona, Spain), and Domenico Bianculli (University of Luxembourg, Luxembourg).

We would like to thank each organizer of the eight workshops at STAF 2018 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. 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 STAF 2018, Jean-Michel Bruel and Marc Pantel, for their help during the organization of all workshops, as well as ENSEEIHT and the IRIT laboratory that hosted the workshops.

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