

Preface

Executable models have the potential of bringing major benefits to the development of complex systems, as they provide abstractions of complex system behaviors and allow for the performance of early analyses of that behavior. Despite the potential benefits of executable models, there are still many challenges to solve, such as the lack of maturity in the definition of and tooling for executable modeling languages, and the limited experience with executable modeling in much of the software development industry.

The International Workshop on Executable Modeling (EXE) was founded as a forum for researchers and practitioners to discuss challenges of executable modeling, propose potential solutions, and assess and advance the state of the art in executable modeling. This second edition was held as a full-day event of the ACM/IEEE 19th International Conference on Model Driven Engineering Languages and Systems (MODELS) on October 3, 2016 in Saint-Malo, France. Out of fifteen submissions, nine contributions were accepted after a rigorous review process in which each paper was reviewed by three members of the program committee. Four of the accepted contributions are research papers presenting novel and innovative approaches in executable modeling, two are experience reports discussing experiences and lessons learned in the application of executable modeling, one is a tool demonstration, and two are position papers presenting new ideas and early research results on executable modeling. The accepted contributions cover many different aspects of executable modeling including the following:

- engineering methods for executable modeling languages,
- automation techniques for the development of model execution tools,
- customization of executable modeling languages and model execution tools,
- composition, extension, and reuse of executable modeling languages and tools,
- scalability of model execution and execution-based model analysis,
- model execution in the presence of non-determinism and concurrency,
- model execution tools, and
- case studies and experience reports on the adoption of executable modeling.

The workshop's program comprised a keynote by Stephen Mellor on "Executable Modeling: Retrospective and Prospective", the presentations of the accepted papers, and a plenary discussion. The slides of all presentations, as well as the results of the plenary discussion are available at the workshop website: <http://www.modelexecution.org/exe2016>.

We thank the organizers of MODELS 2016 for giving us the opportunity to organize EXE 2016 as part of MODELS 2016 and for their support in the workshop organization. Our special thanks go to the general chairs of MODELS 2016, Benoit Baudry and Benoit Combemale, as well as to the workshop chairs Houari Sahraoui and Manuel Wimmer, whose support was extraordinary. Furthermore, we thank all the presenters and the 35 participants who contributed to the open discussions and made the workshop a lively and successful event. We also want to express our sincere gratitude to Stephen Mellor, who gave us deep insights into his extensive experiences with executable modeling. Lastly, we thank the reviewers and the members of the program committee for their timely and high-quality reviews, and for their inputs to the workshop program.

Program Committee

Colin Atkinson	University of Mannheim, Germany
Francis Bordeleau	Ericsson, Canada
Jordi Cabot	ICREA – UOC, Spain
Tony Clark	Sheffield Hallam University, United Kingdom
Peter Clarke	Florida International University, United States
Benoit Combemale	IRISA and University of Rennes, France
Julien Deantoni	University Nice Sophia Antipolis, CNRS, I3S, Inria, France
Jürgen Dingel	Queen's University, Canada
Martin Gogolla	University of Bremen, Germany
Timothy Lethbridge	University of Ottawa, Canada
Nicholas Matragkas	University of Hull, United Kingdom
Marjan Mernik	University of Maribor, Slovenia
Zoltan Micskei	Budapest University of Technology and Economics, Hungary
Richard Paige	University of York, United Kingdom
Alessandro Romero	Brazilian National Institute for Space Research, Brazil
Bernhard Rumpe	RWTH Aachen University, Germany
Jesús Sánchez Cuadrado	Universidad Autónoma de Madrid, Spain
Markus Scheidgen	Humboldt University Berlin, Germany
Bran Selic	Malina Software Corporation, Canada
Cortland Starrett	One Fact Inc, United States
Eugene Syriani	University of Montreal, Canada
Jérémie Tatibouët	CEA, France
Massimo Tisi	Ecole des Mines de Nantes, France
Mark van den Brand	Eindhoven University of Technology, The Netherlands
Hans Vangheluwe	University of Antwerp, Belgium and McGill University, Canada