

Fourth International Workshop on Executable Modeling (EXE 2018)

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ABSTRACT

The fourth edition of the *International Workshop on Executable Modeling* (EXE) was held on October 14, 2018 in Copenhagen, Denmark, as part of the satellite events of the *ACM/IEEE 21st International Conference on Model Driven Engineering Languages and Systems* (MODELS 2018).

KEYWORDS

Executable Models, Executable Modeling Languages, Model Execution, Model Simulation, Execution Semantics

1 ABOUT THE WORKSHOP

In times of increasing system complexity, time-to-market pressures, and the need for high quality systems, executable models gain importance in the development of software-intensive systems. This is due to their abstraction power allowing the early analysis of complex system behaviors reducing effort and cost in the development and increasing system quality.

The objectives of the *International Workshop on Executable Modeling* (EXE) are to draw attention to the potentials and challenges of executable models and to advance the state-of-the-art in executable modeling. In 2018, the workshop was already held for the fourth time. For this fourth edition, submissions of research papers, experience reports, position papers, and tool demonstrations on various topics of executable modeling were invited. The topics of interest included methodologies, languages, techniques, and methods for designing and implementing executable modeling languages, model execution tools for the validation, verification, and testing of systems, and techniques for the development of model execution tools.

2 PROGRAM

EXE 2018 was held as a full-day workshop at the *ACM/IEEE 21st International Conference on Model Driven Engineering Languages and Systems* (MODELS 2018) on October 14, 2018 in Copenhagen, Denmark. Out of eight submissions, four were accepted after a rigorous reviewing process in which each paper was reviewed by three members of the program committee. The accepted papers comprise three research papers presenting novel and innovative approaches in executable modeling, as well as one tool demonstration of a model execution tool.

The following papers were accepted for EXE 2018:

- (1) “Execution of UTP test cases using fUML” by Marc-Florian Wendland and Niels Hoppe
- (2) “A generic solution for weaving business code into executable models” by Eric Cariou, Olivier Le Goar, Léa Brunschwig and Franck Barbier
- (3) “On executable models that are integrated with program code” by Marco Konersmann
- (4) “EmbeddedMontiArc: Textual modeling alternative to Simulink (Tool Demonstration)” by Evgeny Kusmenko, Jean-Marc Ronck, Bernhard Rumpe and Michael von Wenckstern

All the materials presented at EXE 2018 can be found on the workshop Website <http://modelexecution.org/exe2018>.

3 PROGRAM COMMITTEE

The program committee of EXE 2018 comprised 25 experts in the domain of executable modeling. We thank the program committee members very much for their services in reviewing and discussing the submitted papers.

Program Committee Members

- Francis Bordeleau, Canada
- Andrei Chiş, feenk, Switzerland
- Federico Ciccuzzi, Mälardalen University, Sweden
- Tony Clark, Aston University, UK
- Peter Clarke, Florida International University, USA
- Benoit Combemale, University of Toulouse, France
- Jonathan Corley, University West Georgia, USA
- Julien Deantoni, University Nice Sophia Antipolis, CNRS, I3S, Inria, France
- Thomas Degueule, CWI, The Netherlands
- Davide Di Ruscio, University of L’Aquila, Italy
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- Ernesto Posse, Zeligsoft, Canada
- Taylor Riche, National Instruments, USA

- Bran Selic, Malina Software Corporation, Canada
- Cortland Starrett, One Fact Inc, USA
- Jérémie Tatibouët, CEA, France
- Massimo Tisi, IMT Atlantique, LS2N (UMR CNRS 6004), France
- Simon Van Mierlo, University of Antwerp, Belgium
- Andreas Wortmann, RWTH Aachen University, Germany
- Thanos Zolotas, University of York, United Kingdom

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