Welcome to EXE 2018

4th International Workshop on Executable Modeling
October 14, 2018, Copenhagen, Denmark

Organizers:

Tanja Mayerhofer  
TU Wien, Austria

Philip Langer  
EclipseSource, Austria

Ed Seidewitz  
Model Driven Solutions, USA

Jeff Gray  
University of Alabama, USA

Erwan Bousse  
TU Wien, Austria
Aim of the Workshop

- Highlight **potentials** and **challenges** of executable modeling
- Assess and **advance the state-of-the-art** in executable modeling
- Bring together researchers and practitioners working in executable modeling
- Exchange recent results, ideas, opinions, and experiences
- Coordinate research efforts
Topics

• Engineering methods for executable modeling languages

• Model execution tools
  • Automation techniques for the development of model execution tools
  • Evolution in the context of executable modeling
  • Verification of semantic conformance
  • Case studies and experience reports on the successful or failed adoption of executable modeling
  • Tracing model executions and analyzing model execution traces
  • Customization of executable modeling languages and model execution tools
  • Composition, extension, and reuse of executable modeling languages and model execution tools

• Integration of executable modeling languages and programming languages
  • Semantics-aware model transformations and code generation
  • Scalability of model execution and execution-based model analysis
  • Execution of partial and underspecified models
  • Model execution in the presence of non-determinism and concurrency
  • Surveys and benchmarks of different approaches for the development of executable modeling languages, model execution, and execution-based model analysis
9:15 – 10:30 Session 1: Invited Industry Talks (Chair: Tanja Mayerhofer)

Managing Build Configuration Complexity in Industrial Embedded Systems
Elena Strabykina and Mattias Mohlin (HCL Technologies, Products and Platforms)

Why Executable Models are a Requirement for our Customers
Taylor Riche (National Instruments)

UML Precise Semantics Standards at OMG: Executing on the Vision
Ed Seidewitz (Model Driven Solutions)

10:30 – 11:00 Coffee Break
11:00 – 12:35 Session 2: Paper Presentations (Chair: Erwan Bousse)

Execution of UTP test cases using fUML
Marc-Florian Wendland and Niels Hoppe

A generic solution for weaving business code into executable models
Eric Cariou, Olivier Le Goaer, Lea Brunschwig and Franck Barbier

On executable models that are integrated with program code
Marco Konersmann

EmbeddedMontiArc: Textual modeling alternative to Simulink (Tool Demonstration)
Evgeny Kusmenko, Jean-Marc Ronck, Bernhard Rumpe and Michael von Wenckstern

12:35 – 14:00 Lunch Break
14:00 – 15:30 Session 3: Keynote (Chair: Jeff Gray)

Model Execution: Past, Present and Future
Benoit Combemale

15:30 – 16:00 Coffee Break
Program

16:00 – 17:30 Session 4: Live Tool Demonstrations & Workshop Closing (Chair: Ed Seidewitz)

Execution of UTP test cases using fUML
Marc-Florian Wendland and Niels Hoppe

PauWare (A generic solution for weaving business code into executable models)
Eric Cariou, Olivier Le Goaer, Lea Brunschwig and Franck Barbier

Codeling (On executable models that are integrated with program code)
Marco Konersmann

Papyrus for xtUML
Cortland Starrett, Robert Mulvey, Keith Brown and Levi Starrett

WebGME Dynamic Systems Studio (WebGME-DSS)
Patrik Meijer and Tamas Kecskes

LieberLieber Embedded Engineer
Bernhard Wally
Thank you!
Publication of Resources

Proceedings
- Will be published on CEUR soon: http://ceur-ws.org

Presentations
- Will be made available at http://www.modelexecution.org/exe2018
- Please send a copy of your slides to exe@modelexecution.org
Questions?