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

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

Statistics



Program Committee

Francis Bordeleau
Peter Clarke
Thomas Degueule
Nicholas Matragkas
Ernesto Posse
Jérémie Tatibouët
Thanos Zolotas

Andrei Chiş
Benoit Combemale
Davide Di Ruscio
Marjan Mernik
Taylor Riche
Massimo Tis

Federico Ciccozzi
Jonathan Corley
Juergen Dingel
Zoltan Micskei
Bran Selic
Simon Van Mierlo

Tony Clark
Julien Deantoni
Nicolas Hili
Domenik Pavletic
Cortland Starrett
Andreas Wortmann

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?