Overview and Scope

There is an increasing demand to use formal methods for the verification and validation of safety-/QoS-critical systems. Newer standards, such as DO-178C (avionics), ISO 26262 (automotive), IEC 62304 (medical devices), and CENELEC EN 50128 (railway systems) emphasize the need for formal methods and model-based development, speeding up their adaptation in industry.

The aim of this workshop is to bring together researchers and engineers who are interested in the application of formal and semi-formal methods. Specific topics include, but are not limited to:

- formal methods for safety-/QoS-critical systems, including avionics, automotive, railway, and medical systems
- case studies and experience reports
- methods, techniques, and tools
- limitations of formal methods in industry (usability, scalability)
- formal analysis support for modeling languages used in industry, such as AADL, Ptolemy, SysML, SCADE, Modelica.
- code generation from validated models.

Publication

Accepted papers in categories A – D will appear in the proceedings of the workshop, published as a volume in Springer’s Communications in Computer and Information Science (CCIS) series.

Authors of selected accepted papers will be invited to submit extended versions to appear in a special issue of the Science of Computer Programming journal by Elsevier.

Submission

We solicit submissions reporting on:

A – original research contributions (16 pages max)
B – applications and experiences (16 pages max)
C – surveys, comparisons, state-of-the-art reports (16 p. max)
D – tool papers (5 pages max)
E – position papers and work in progress (5 pages max)

Important Dates

Submission deadline: September 4, 2018
Notification: October 5, 2018
Workshop: November 16, 2018

Program Committee

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