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 semiformal 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.

Submission

We solicit submissions reporting on:

A — original research contributions (15 pages max)
B — applications and experiences (15 pages max)
C — surveys, comparisons, state-of-the-art reports (15 p. max)
D — tool papers (5 pages max)
E — position papers and work in progress (5 pages max)

Important Dates

Submission deadline: September 5, 2015
Notification: October 5, 2015
Workshop: November 6 and/or 7, 2015

Program Committee


King Fahd University, Saudi Arabia
University Paris 13, France
JAIST, Japan
AIST, Japan (chair)
Carnegie Mellon University, USA
KTH, Sweden and UC Berkeley, USA
Stellenbosch University, South Africa
National Centre of Sciences & Tech., Pakistan
NASA JPL, USA
National Institute of Informatics, Japan
AIST, Japan
Augsburg University, Germany
Kansas State University, USA
SRI International, USA
University of Waikato, New Zealand
Université Nice Sophia Antipolis, France
University of Napoli “Federico II”, Italy
RWTH Aachen University, Germany
University of Oslo, Norway (chair)
Université catholique de Louvain, Belgium
Malmö University, Sweden
Escuela Colombiana de Ingeniería, Colombia
Swansea University, UK
ETH Zürich, Switzerland
University of Pennsylvania, USA
Concordia University, Canada
INRIA Rennes, France
McMaster University, Canada
McMaster University, Canada
University of Minnesota, USA
East China Normal University, China