



4th Int. Workshop on Applied Verification for Continuous and Hybrid Systems

CMU campus alongside CPSWeek, Pittsburgh, USA, April 17, 2017

The workshop on applied verification for continuous and hybrid systems (ARCH) brings together researchers and practitioners to establish a curated set of benchmarks and test them in a friendly competition.

Call for Submissions

Verification of continuous and hybrid systems is increasing in importance due to new cyber-physical systems that are safety- or operation-critical. This workshop addresses verification techniques for continuous and hybrid systems with a special focus on the transfer from theory to practice. Topics include, but are not limited to

- Proposals for new benchmark problems (not necessarily yet solvable)
- Tool presentations
- Tool executions and evaluations based on ARCH benchmarks
- Experience reports including open issues for industrial success
- Reports on results of our friendly competition

Submission Guidelines

Submissions consist of papers of ideally 3-8 pages (pdf) and optional files (e.g. models or traces) submitted through the ARCH'17 EasyChair web site (<http://www.easychair.org/conferences/?conf=arch17>). Authors have to use the EasyChair template (http://www.easychair.org/publications/for_authors). The extended abstract should be classified in its title as *benchmark proposal*, *tool presentation*, *benchmark results*, or *experience report*. Submissions receive at least 3 anonymous reviews, including one from industry and one from academia. Details on the evaluation criteria can be found at <http://cps-vo.org/group/ARCH/CallForSubmissions>.

Submission deadline: February 15, 2017
Notification: March 7, 2017
Final Version: March 31, 2017
Workshop: April 17, 2017 (**different from other CPS Week workshops**)
Website: <http://cps-vo.org/group/ARCH> (includes forums, archive, wiki, etc.)

Prize

The paper with the most promising benchmark results receives a prize of 500 Euros sponsored by Robert Bosch GmbH, Germany. The winner is preselected by the program committee and determined by an audience voting.

Organizers

Program chairs: **Matthias Althoff**, Technische Universität München, Germany
Goran Frehse, UJF-Verimag, France

Local chair: **Sebastian Scherer**, Carnegie Mellon University, USA
Publicity chair: **Sergiy Bogomolov**, Australian National University, Australia
Evaluation chair: **Taylor T. Johnson**, Vanderbilt University, USA

Program Committee (tentative)

Academia	Industry
Pieter Collins (Maastricht Univ.)	Ajinkya Bhawe (LMS Siemens)
Alexandre Donze (UC Berkeley)	Jyotirmoy Deshmukh (Toyota)
Ian Mitchell (Univ. British Columbia)	Luca Parolini (GE Global Research)
Sayan Mitra (UI Urbana Champaign)	Alessandro Pinto (United Technologies)
Andre Platzer (CarnegieMellon Univ.)	Frank Schiller (Beckhoff Automation)
Nacim Ramdani (Université d'Orléans)	Matthias Woehrle (Bosch)
Sriram Sankaranarayanan (UC Boulder)	William Hung (Synopsys Inc)
Xin Chen (RWTH Aachen University)	Olivier Bouissou (MathWorks)
Sicun Gao (Massachusetts Institute of Technology)	Daniel Bryce (SIFT)
Stanley Bak (Air Force Research Lab)	Aaron Fifarek (Linquest)