HSCC 2018
Porto, 11-13 April 2018

HSCC 2018 is the 21st in a series of conferences focusing on original research on concepts, tools, and techniques from computer science, control theory, and applied mathematics for the analysis and control of hybrid systems, with an emphasis on computational aspects. By drawing on strategies from computation and control, hybrid systems theory finds application in both man-made cyber-physical systems (ranging from small robots to global infrastructure networks) and natural systems (ranging from biochemical networks to physiological models).

Papers are expected to cover a wide spectrum of topics from theoretical results to practical considerations, from academic research to industrial adoption.

Topics of interest include:

- Mathematical foundations, computability and complexity
- Analysis, verification, validation, and testing
- Modeling paradigms and techniques
- Design, synthesis, planning, and control
- Programming and specification languages
- Network science and network-based control
- Security, privacy, and resiliency in cyber-physical systems with a focus on computation and control
- Artificial intelligence and machine learning in control algorithms
- Software tools for above topics
- Applications and industrial case studies in: automotive, transportation, autonomous systems, avionics, energy and power, robotics, medical devices, manufacturing, systems and synthetic biology, models for the life sciences, and other related areas

Paper submissions: Regular Papers (maximum 10 pages) and **Tool and Case Study Papers** (maximum 6 pages)

Participation to the **repeatability evaluation process** is strongly encouraged for Tool and Case Study papers at the time of submission. All papers that pass the repeatability evaluation are eligible for a "Best Repeatability Evaluation Award"

New this year Test-of-Time award and Best Paper award

HSCC 2018 is part of the eleventh **Cyber Physical Systems Week**, and co-located with the International Conference on Cyber-Physical Systems, Internet-of-Things Design and Implementation, Information Processing in Sensor Networks, the Real-Time and Embedded Technology and Applications Symposium, and related workshops.

Posters and demos selected based on a 2-page abstract will be shown at joint CPS week poster/demo sessions.

IMPORTANT DATES

Paper submission: Oct 6 2017
Notification: Dec 2017
Camera-ready: Feb 2018
Conference: April 11-13, 2018

Program Committee Chairs:
Maria Prandini, Politecnico di Milano and Jyotirmoy V. Deshmukh, USC

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