

# HSCC 2020 - Digital Format

Submitted by Anonymous on Fri, 09/13/2019 - 9:58am

[Apr 21, 2020 7:00 am - Apr 24, 2020 6:00 pm AEST](#)

## COVID-19 UPDATE

**CPS-IoT Week 2020 is still scheduled to happen 21-24 April, but in an entirely virtual format due to the pandemic. In accordance to the event guidelines, at least one author registration will be required for each paper to be included in the proceedings. Please stay tuned for further information regarding the CPS-IoT Week 2020. If you have any questions or need additional information, please [email us](#) for further details.**

## 23rd ACM International Conference on Hybrid Systems: Computation and Control

April 21-24, 2020 | Sydney Australia |

[https://berkeleylearnverify.github.io/HSCC\\_2020/](https://berkeleylearnverify.github.io/HSCC_2020/)

Hybrid Systems: Computation and Control (HSCC) 2020 is the 23rd 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 dynamical systems with an emphasis on computational aspects. By drawing on strategies from computation and control, the hybrid systems field offers techniques that are applicable to 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 in the conference are expected to range over a wide spectrum of topics from theoretical results to practical considerations, and from academic research to industrial adoption.

Topics of interest include, but are not limited to

- Mathematical foundations
- Computability and complexity analysis
- Verification, validation, and testing
- Modeling paradigms and techniques
- Design, synthesis, planning, and control
- Nonlinear and safety-critical control
- Programming and specification languages
- Network science and network-based control
- Security, privacy, and resilience for cyber-physical systems with focus on computation

and control

- Autonomy, artificial intelligence and machine learning in CPS
- Design automation for CPS, including design formalisms, techniques and tools for the 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.

## SPECIAL TRACKS

This year, HSCC will have three special tracks on interdisciplinary topics of increasing interest and importance to CPS:

1. Artificial Intelligence and Machine Learning in CPS (autonomous and semi-autonomous CPS, learning-based CPS, deep learning, intersection of robotics/AI and CPS, etc.), and
2. Design Automation for CPS (modeling, specification, verification, synthesis, composition, hierarchy, languages, etc. for CPS design).
3. Autonomy and Robotics. The submission requirements and review process for special track papers will be the same as regular papers. The main reason to have a special track is to broaden the HSCC pool of papers in the direction of these topics.

Event Details

**Location:** Sydney Australia

**URL:** [https://berkeleylearnverify.github.io/HSCC\\_2020/](https://berkeleylearnverify.github.io/HSCC_2020/)

[Sync this event to your calendar](#)



[Testing Control Modeling Science of Security Validation and Verification Foundations Conference](#)

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