Call for Papers

DESTION 2026

8th Workshop on Design Automation for CPS and IoT

https://cps-vo.org/group/DESTION2026

In conjunction with the ACM/IEEE CPS-IoT Week 2026

May 11th, 2026, Saint Malo, France

Overview

Aircraft, automobiles, industrial robots, and medical devices comprise Cyber-Physical Systems (CPS) and Internet-of-Things (IoT) applications that promise major economic and societal benefits. However, the design, verification, validation, and operation of such systems are challenging due to scale, complexity, uncertainty, and stringent requirements on safety, performance, security, availability, and many other metrics.

Over the past decades, product development has shifted from largely mechanical systems with loosely coupled components to highly integrated cyber-physical architectures with dense software-hardware interactions. This transition has dramatically expanded design complexity, often resulting in multi-year development cycles with numerous redesign loops. Current industrial practice frequently relies on "hot-starting" new products from existing baselines — an approach that reduces risk but also inhibits innovation by limiting systematic exploration of the vast design space.

Recent advances in *AI for Design Automation* offer a promising path forward. Physics-informed and neuro-symbolic machine learning can accelerate simulation; probabilistic modeling and Bayesian methods quantify uncertainty; abstraction reduces design search complexity; generative techniques find shortcuts through complex design spaces. At the same time, the rise of AI-enabled CPS creates the need for *Design Automation for AI*, including neural architecture search, model verification, runtime monitoring, knowledge representation, heterogeneous simulation, and the use of foundation models in engineering workflows.

This full-day workshop will provide a premier forum for researchers and engineers from academia, industry, and government to present and discuss challenges, promising solutions, and applications in design automation for CPS and IoT. DESTION 2026 will have a broad scope covering techniques and tools for modeling, simulation, synthesis, validation, and verification of CPS and IoT, with a focus on "AI for Design Automation" and "Design Automation for AI", and their applications in a variety of domains, such as automotive and transportation systems, avionics, robotics, building architectures, grid, and medical devices.

Topics of Interest

We invite contributions in the following main topics (but not limited to):

- Physics-informed machine learning for CPS/IoT
- Foundation models for design automation
- Neuro-symbolic learning and systems
- Modeling and simulation of CPS/IoT
- Uncertainty quantification for CPS/IoT
- Assurance and formal verification
- Correct-by-construction design and evolution
- Requirement engineering, test & evaluation

- Languages and tools for specification and design
- Architectural design and design space exploration
- Run-time monitoring and verification
- Benchmarks and datasets for CPS/IoT

Submissions

All submissions must be in English and will undergo a single-blind peer review process. We consider only original papers that have not been submitted to or published in other conferences or journals. All accepted papers and abstracts will be published as part of the DESTION 2026 proceedings. At least one author of each accepted paper must register for the in-person workshop and present the paper.

- **Full Papers:** Full technical contributions with $\leq$6 pages, excluding references and appendix.
- **Shorter Papers, Tool Papers, Benchmark Releases, and Demos:** We also welcome shorter papers, tool papers, benchmark releases, and demos via submission of a 2-page abstract (excluding references and appendix). Submission of supplementary materials for tools and demos (videos, repository links, and web applications) is encouraged.

Submission guidelines:
Please submit your papers and abstracts at https://easychair.org/conferences/?conf=destion2026.
Use the IEEE two-column conference template: https://www.ieee.org/conferences/publishing/templates.
In case of any questions, please do not hesitate to reach out to us via destion2026@tbeckers.com.

Important Dates

- Paper submission deadline: March 5th, 2026
- Notification of acceptance: March 15th, 2026
- Camera-ready deadline: March 25th, 2026
- Workshop date: May 11th, 2026

(All deadlines are 23:59 AoE.)

Previous Years

DESTION has built a strong tradition of technical discussion; its recent iterations can be seen below:

- 2025: https://cps-vo.org/group/DESTION2025
- 2024: https://cps-vo.org/group/DESTION2024
- 2023: https://cps-vo.org/group/DESTION2023
- 2022: https://cps-vo.org/group/DESTION2022

Organizing Committee

General Co-Chairs:

- Thomas Beckers (Vanderbilt University, USA)
- Lars Lindemann (ETH Zürich, Switzerland)
- Ivan Ruchkin (University of Florida, USA)

Program Co-Chairs:

- Himanshu Neema (Vanderbilt University, USA)
- Arun Ramamurthy (Siemens, USA)

Steering Committee:

- Janos Sztipanovits (Vanderbilt University, USA)
- Qi Zhu (Northwestern University, USA)
- S. Shankar Sastry (University of California, Berkeley, USA)
- Alberto Sangiovanni-Vincentelli (University of California, Berkeley, USA)
- Werner Damm (Carl von Ossietzky Universitat Oldenburg, Germany)
- Edward A. Lee (University of California, Berkeley, USA)
- Richard Murray (California Institute of Technology, USA)
- George J. Pappas (University of Pennsylvania, USA)