CPS&IoT'2025 Summer School on Cyber-Physical Systems and Internet-of-Things Budva, Montenegro, June 10-14, 2025

Schedule

Day 1, Tuesday 10 June: 09:00-09:15 Event Chairs and Special Guests Opening Ceremony of the CPS&IoT'2025 Summer School, and MECO'2025 and CPS&IoT'2025 Conferences Title: 09:15-10:15 Wolfgang Ecker, Infineon and TU Munich, DE Keynote: How to Circumvent a RISCV Dead End 10.15-10.30 Lech Jóźwiak, TU/e, NL and Radovan Stojanović, University of Montenegro, ME Introduction to the CPS&IoT'2025 Summer School Title: 10.30-11.00 Break 11.00-13.00 Lech Jóźwiak, TU/e, NL Title: Green CPS and IoT for Green World 13.00-14.00 Lunch Break 14.00-15.30 Said Hamdioui, TU Delft, NL Title: The Future of Energy-Efficient Computing: Beyond CMOS and Von Neumann 15.30-17.00 Natalie Simson & Wolfgang Ecker, DE **RISCV vs. ARM** Title: 17.00-17.30 Break 17.30-19.00 Natalie Simson & Wolfgang Ecker, DE Title: **RISCV vs. ARM** 21.00 Gala Dinner Day 2, Wednesday 11 June: 09.30-10.30 Reiner John, AVL, AT Keynote: Al+ - Self-Awareness as the Key to Resilience, Efficiency, and ROI Title: 10.30-11.00 Break 11.00-12.30 Reiner John, AVL, AT Applications of Quantum Sensing and Al in Real-Time Edge Computing Systems (lecture/hands-on) Title: 12.30-14.00 Lunch Break 14.00-17.00 Nabil Abdennadher, Univ. of Applied Sciences, West. Switzerland, CH Title: Towards a decentralized Federated Learning based edge-to-edge Continuum Computing Framework 17.00-17.30 Break 17.30-19.00 Iryna DE ALBUQUERQUE SILVA, CEA, FR Aidge: Embedded Al Open Source Platform Title: Day 3, Thursday 12 June: 09.00-10.30 Samir OUCHANI, CESI, FR Title: Designing Trustworthy Smart Systems: Bridging Artificial Intelligence and Formal Methods 10.30-11.00 Break 11.00-12.30 Zakaria Chihani, CEA, FR Title: Trustworthy AI: Methods & Tools 12.30-13.30 Lech Jóźwiak, TU/e, NL Quality-driven Design of Cyber-Physical Systems Title[.] 13.30-14.30 Lunch Break 14.30-16.30 Hans Vangheluwe and Joachim Denil, University of Antwerp, BE General systems engineering concepts (for CPS) and General modelling and simulation concepts Title[.] 16.30-17.30 Joachim Denil, University of Antwerp, BE Title: Requirements Modelling for Testing and Run-time Monitoring 17.30-18.00 Break 18.00-19.00 Rakshit Mittal and Hans Vangheluwe, University of Antwerp, BE Modelling and simulation of physical systems using OpenModelica (lecture/hands-on) Title: Day 4, Friday 13 June: 09.00-10.00 Rakshit Mittal and Hans Vangheluwe, University of Antwerp, BE Calibration and control of physical systems using OpenModelica (lecture/hands-on) Title: 10.00-12.00 Joeri Exelmans and Hans Vangheluwe, University of Antwerp, BE Modelling, simulation, and synthesis of discrete-event systems using Statecharts (lecture/hands-on) Title: 12.00-13.00 Lunch Break 13.00-16.30 Anish Bhobe, Dominique Blouin, and Yara Hallak, Telecom Paris, FR Title: Modelling, verification, and synthesis of embedded cyber-physical systems using AADL and RAMSES (lecture/handson) 16.30-17.00 Break 17.00-18.30 Radovan Stojanovic, University of Montenegro and MECOnet, ME Title: Design of performance and energy efficient nodes for smart systems 18.30-19.00 Closing of the CPS&IoT'2025 Summer School

+ Free participation in sessions of the CPS&IoT'2025 Conference and MECO'2025 Conference Summer School participants are expected to come with their own laptops. Internet access will be guaranteed.

Day 5, Saturday 14 June: Excursion possible (excursion fee is not included in the summer school fee)