

**CPS&IoT'2023 Summer School on
Cyber-Physical Systems and Internet-of-Things
Budva, Montenegro, June 6-10, 2023**

Schedule

Day 1, Tuesday 6 June:

08:00-09:00 Registration

09:00-09:15 Event Chairs and Special Guests

Title: **Opening Ceremony of the CPS&IoT'2023 Summer School, and MECO'2023 and CPS&IoT'2023 Conferences**

09:15-10:15 Andreas Burger, Robert Bosch GmbH, **DE**

Keynote: Future Cyber-Physical Systems – between Digital Twins and

Metaverse 10.15-10.30 Break

10.30-11.00 Lech Józwiak, TU/e, **NL**

Title: Introduction to the CPS&IoT'2023 Summer School

11.00-12.30 Lech Józwiak, TU/e, **NL**

Title: Green CPS and IoT for Green World

12.30-14.00 Lunch Break

14.00-15.30 Sakir Sezer, NVIDIA, **UK**

Title: DPU Technology: Redefining next generation Datacenter Security

15.30-17.00 Kevin Mika, Uni-Bielefeld, **DE** and Piotr Zierhoffer, Antmicro, **PL**

Title: VEDLIoT – Accelerated AIoT

17.00-17.30 Break

17.30-19.00 Aizea Lojo and Juan Besga, Ikerlan, **ES**; Iñaki Paz, LKS, **ES**; Gianluca Brilli and Paolo Burgio, from Unimore, **IT**;
Martin Matschnig, Siemens, **AT**

Title: FRACTAL: A Cognitive Computing Platform Node for the Edge

Day 2, Wednesday 7 June:

09.00-10.00 Jürgen Becker, KIT, **DE**

Title: **Keynote: Embedded reliable HPC enabling Automotive & IoT Intelligence**

10:15-10:45 BREAK

10.45-12.15 Mario DIAZNAVA, ST Grenoble, **FR**

Title: ANDANTE: AI for New devices and Technologies at the Edge

12.15-13.45 Tobias Dörr and Florian Schade, KIT, and Alexander Ahlbrecht, DLR, **DE**

Title: Simulation-based development of networked avionics systems using the XANDAR toolchain

13.45-14.15 Lunch Break

14.15-17.15 Dominique Blouin, Telecom Paris, and Anish Bhoje, Institut Polytechnique de Paris, **FR**
Rakshit Mittal, University Antwerpen, **BE**

Title: Embedded Systems Modeling, Analysis and Automatic Code Generation with AADL and RAMSES (hands-on)

17.15-17.45 Break

17.45-19.15 Hector Posadas, Jose Luis Vazquez and Daniel Suarez, TEISA/UNICAN, **ES**

Title: Offloading and Reconfiguration of Functional Components in Embedded Hardware Resources: Application to AI Components

21.00 Gala Dinner

Day 3, Thursday 8 June:

09.00-10.15 Naim Dahnoun, University of Bristol, **UK**

Title: **Keynote: Enhancing Remote and Face-to-Face Learning: Real-Time Feedback System for Teaching Platforms**

10.15-10.45 Break

10.45-13.45 Dimitris Karadimas, AVN Innovative Technology Solutions, **CY**

Title: XANDAR: CI/CD automations for complex pipelines with hardware in the loop

13.45-14.45 Lunch Break

14.45-17.150 Morayo Adedjouma and Réda Nouacer, CEA, **FR**

Title: From Knowledge-based to Model-based Engineering of embedded intelligence and trust in CPS

17.15-17.45 Break

17.45-19.15 Zakaria Chihani and Réda Nouacer, CEA, **FR**

Title: Towards Characterizing AI Trustworthiness

Day 4, Friday 9 June:

09.00-10.30 Christoph Schmittner, AIT, **AT**

Title: Security Engineering for Aquaponic – Challenges between Industrial Control and Farming

10:30-11:00 Break

11.00-12.15 Radovan Stojanovic, University of Montenegro and MECOnet, **ME**

Title: Design of performance and energy efficient nodes for smart systems

12.15-13.30 Lunch Break

13.30-15.00 Ramiro Samano Robles, ISEP, **PT**

Title: Evolution and evaluation of wireless technologies and standards towards the convergence of 5G/6G and IoT

15.00-16.30 Andrej Škraba, University of Maribor, **SI**

Title: Overview of Several CPS&IoT Prototypes: Wheelchair, Group Heart Rate Monitoring, PID DC Motor Control

16.30-17.00 Break

17.00-18.30 Presenter Christos Antonopoulos, UoP, University of Peloponnese, **GR**

Title: SMART4ALL project: Customized Low-Energy Computing for CPS

18.30-19.00 Closing of the CPS&IoT'2023 Summer School

+ Free participation in sessions of the CPS&IoT'2023 Conference and MECO'2023 Conference **Summer**

School participants are expected to come with their own laptops. Internet access will be guaranteed.

Participants of the tutorial “VEDLIoT – Accelerated AIoT” are requested to bring their own laptop in order to take part in the tutorial. It is recommended to use a Linux – based operating system, or Linux compatible systems like WSL (Windows Subsystem for Linux).

Day 5, Saturday 10 June: Excursion possible (excursion fee is not included in the summer school fee)

MECO2023, CPSIoT2023, SS-CPSIoT2023 ZOOM LINKS

TUES: 06.06.2023.

THUES – 06.06.- ROOM1, from 08:30 –

link: <https://us02web.zoom.us/j/3740228367?pwd=Z1hTQk05Z3NtQ3VkMHc3V2lvYjgyQT09>

THUES – 06.06 – ROOM2, from 08:30 –

link: <https://us06web.zoom.us/j/8702896180?pwd=ZlppYkR5NTZqUTIhbnFzS0taWIA0dz09>

THUS – 06.06 -ROOM3, from 08:30 –

link: <https://us02web.zoom.us/j/5778061229?pwd=KzE2RWdjSkh6b0YvL1lrcDhFckNYZz09>

THUS – 06.06 – ROOM-SS, from 08:30 –

link: <https://us06web.zoom.us/j/8342653096?pwd=ZUF0aHppdXVkc1IWRDNTSnNIYmF4UT09>

WED: 07.06.2023.

WED – 07.06.- ROOM1, from 08:30 –

link: <https://us02web.zoom.us/j/3740228367?pwd=Z1hTQk05Z3NtQ3VkMHc3V2lvYjgyQT09>

WED – 07.06 – ROOM2, from 08:30 –

link: <https://us06web.zoom.us/j/8702896180?pwd=ZlppYkR5NTZqUTIhbnFzS0taWIA0dz09>

WED – 07.06 -ROOM3, from 08:30 –

link: <https://us02web.zoom.us/j/5778061229?pwd=KzE2RWdjSkh6b0YvL1lrcDhFckNYZz09>

WED – 07.06 – ROOM-SS, from 08:30 –

link: <https://us06web.zoom.us/j/8342653096?pwd=ZUF0aHppdXVkc1IWRDNTSnNIYmF4UT09>

THURS: 08.06.2023.

THURS – 08.06.- ROOM1, from 08:30 –

link: <https://us02web.zoom.us/j/3740228367?pwd=Z1hTQk05Z3NtQ3VkMHc3V2lvYjgyQT09>

THURS – 08.06 – ROOM2, from 08:30 –

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link: <https://us06web.zoom.us/j/8342653096?pwd=ZUF0aHppdXVkc1IWRDNTSnNIYmF4UT09>

FRI: 09.06.2023.

FRI – 09.06.- ROOM1, from 08:30 –

link: <https://us02web.zoom.us/j/3740228367?pwd=Z1hTQk05Z3NtQ3VkMHc3V2lvYjgyQT09>

FRI – 09.06.- ROOM-SS, from 08:30 – link:

<https://us06web.zoom.us/j/8342653096?pwd=ZUF0aHppdXVkc1IWRDNTSnNIYmF4UT09>