

MECO'2024 & CPSIoT'2024 PROGRAMME

Budva, Montenegro, 11-14 June 2024, Hotel Budva, Montenegro

General Schedule

TIME/DAY-ROOM	TUES (11.06) - ROOM1	TUES(11.06)-ROOM2	TUES(11.06)-ROOM4	WED(12.06.)- ROOM1	WED(12.06.)-ROOM2	WED(12.06.)-ROOM4	THURS(13.06)- ROOM1	THURS(13.06.)-ROOM2	THURS(13.06.)-ROOM4	THURS(13.06.)-ROOM3
09_00	SESSION_00 (Opening)			SESSION_02(Keynotes2)			SESSION_03(Keynotes3)			SS
09_30	SESSION_01(Keynotes1)									
10_30	BREAK									
11_00	SESSION_1 7	SESSION_2 8	SESSION_19 CO&IN DISS	SESSION_7 7	SESSION_8 8	SESSION_22 PRO DISS	SESSION_13 8	SESSION_14 7	SESSION_25	SS
13_00	LUNCH									
15_00	SESSION_3 7	SESSION_4 7	SESSION_20 CO&IN DISS	SESSION_9 7	SESSION_10 6	SESSION_23 PRO DISS	SESSION_15 7	SESSION_16 FREE	SESSION_26	SS
17_00	BREAK									
17_30	SESSION_5 7	SESSION_6 7	SESSION_21 6	SESSION_11 7	SESSION_12 7	SESSION_24 FREE	SESSION_17 ZID WORKSHOP	SESSION_18 FREE	SESSION_27	SS
21_00	DINNER			SOCIAL LIFE			CLOSING(20:00)			SOCIAL
Legend:	IN-VENUE	ON-LINE	PROJECTS / COMP/DISS	SS-Summer School	FREE SESSION	ZOOM LINKS	See at the end of Programme			



REGISTRATION: Monday (MON), 10 June, 18.00-20:00; Tuesday (TUES), 11 June, 07:45-08:45; Wednesday (WED), 12 June, 08:00-08:45

Detailed Schedule

TUES: 11.06.2024

		IN-VENUE	ON-LINE	FREE SLOT	114					
		ZOOM LINK THUES (11.06) ROOM1 (See at the end of Programme)								
SESSION_0 (Opening)	TUES -ROOM1-09-00	Prof. dr Budimir Lutovac, UCG, Dean of ETF; Mrs Marica Melovic, MSc, Ministry of Science and Technological Development of Montenegro; Bojana Femić-Radosavović, The Innovation fund of Montenegro; Prof. dr Radovan Stojanovic, General Chair; MECO fellows, friends and partners								
SESSION_K1 (Keynote1)	TUES -ROOM1-09-30 CHAIR: Mooney Vincent J	Tarek El-Ghazawi, ECE Department, the George Washington University, USA, The Future of Computing: From ExaFLOPS to Exotic Processor Technologies								
BREAK	10:30	BREAK								
SESSION_1	TUES -ROOM1-11-00 Chairs: Chen Liu and Miroslav Hagara	Chen Liu, Florian Kelber, Bernhard Vogginger and Christian Mayr, CAFAR is Convolution: Fast Target Detection with Machine Learning Accelerator	George Dan Mois, Radu Etz, Teodora Sanislav and Silviu Corneliu Folea, Open Source in Embedded Systems Development	Yavuz Selim Taspinar and Ilkay Cinar, Distinguishing Between AI Images and Real Images with Hybrid Image Classification Methods	Miroslav Hagara, Alexander Satka, Peter Kubinec and Radovan Stojanovic, Vibration monitoring using sub-pixel edge localization	Zoran Loncarevic and Dragan Golubović, Improved Target Trajectory Reconstruction in HFSWRs Using a DBSCAN Clustering Algorithm	Dmytro Petryk, Ievgen Kabin, Peter Langendoerfer and Zoya Dyka, On the Importance of Reproducibility of Experimental Results Especially in the Domain of Security	Miroslav Kuzela, Tomas Fryza and Ondrej Zeleny, Using Computer Vision and Machine Learning for Efficient Parking Management: A Case Study		
LUNCH	13:00	LUNCH				7				
SESSION3	TUES -ROOM1-15-00 Chairs: Yu-Ting Chiang and Djurdj Budimir	Guo-Hao Li, Yu-Ting Chiang and Chao Wang, Traffic-Aware Video Streaming Topology Reconfiguration for Smart City Applications	Moses Kasule and Djurdj Budimir, Nonlinear Distortion Analysis in Wireless Cellular 5G IoT Systems	Pierre-Louis Sixdenier, Stefan Wildermann and Jürgen Teich, GRES: Guaranteed Remaining Energy Scheduling of Energy-harvesting Sensors by Quality Adaptation	Cihan Ucar, Muharrem Maloku, Olga Yugay and Djurdj Budimir, IoT Motion Detection Sensors for Monitoring in a Smart Campus	Musa Doğan and Ilker All Özkan, Automated Hair Segmentation in Dermoscopy Images with U-Net Based Approaches	Jan Körner, Samuel Bach, Albin Karlsson, Linus Sundkvist and Romaric Duvignau, Efficient Monitoring of CPS and IoT Systems: A Deployment Guide for Empirical Evaluations	Giuseppe Spadavecchia, Marco Fiore, Marina Mongiello and Daniela De Venuto, A Novel Approach for Fast and Secure Data Transmission using Blockchain and IoT		
BREAK	17:00	BREAK								
SESSION5	TUES -ROOM1-17-30 Chairs: Roberto Metere, Husam Kareem	Marco Finocchiario, Salvatore Monte Leone, Enrico Russo, Maurizio Palesi and Davide Patti, Lessons Learned on the Design of Cost-Effective and Highly Compatible Smart Gloves	Roberto Metere, Ricardo M. Czekster and Luca Arnaboldi, Enhancing Expressiveness in Stochastic Modelling of Cyber-Physical Systems	Husam Kareem, Oliver Krammer and Dmitriy Dunaev, Assessing Temperature Sensitivity and Ring Oscillator Count Impact on Configurable Ring Oscillator PUF Performance	Husam Kareem and Dmitriy Dunaev, Assessing Security and Performance: Varying Ring Oscillator Counts in Configurable Inversion Unit-based PUF	Abdiaziz Abdi, Hajar Bennouri and Anthony Keane, Cyber Resilience, Risk Management, and Security Challenges in Enterprise-Scale Cloud Systems: Comprehensive Review.	Zichao Shen, Jose Nunez-Yanez and Naim Dahnoun, MMIDNet: Secure human identification using millimeter-wave radar and deep learning	Avni Rustemi, Vladimir Atanasovski, Aleksandar Risteski, Florim Idrizi and Valentina Angelkoska, Theoretical Approach Of Implementing Blockchain And Artificial Intelligence For Diploma Verification		
SOCIAL	21:00	CONFERENCE DINNER				7				
		ZOOM LINK THUES (11.06) ROOM2 (See at the end of Programme)								
SESSION2	TUES -ROOM2-11-00 Chairs: Ran Guo, Robert Kunzelmann	Kilian Le Gall, Laurent Lemarchand and Catherine Dezan, Online USV Re-planning with Embedded Pareto Sets	Jakub Zahradnik, Martin Danhel and Hana Kubatova, Integration of PXROS-HR with Micro-ROS in Robotic Systems	Jordan Kralev, Asparuh Markovski and Tsonyo Slavov, Design of mu-PD Glucose Regulation for Type I Diabetes Mellitus	Jan Onderka, Formal Verification of Machine-Code Systems by Translation of Simulable Descriptions	Ran Guo, Eric Dekneuveil, Gilles Jacquemod and Pascal Henry Biwole, From SysML Application Model to Executable OpenCL Code: A System-Level Design Approach	Michael Schirmer, David Maier and Johannes Geier, XCP ² : An XCP-Proxy Server for Concurrent Multinode XCP Access	Saruni Fernando, Robert Kunzelmann, Daniela Sánchez Lopera, Jad Al Halabi and Wolfgang Ecker, Leveraging Large Language Models for the Automated Documentation of Hardware Designs		
LUNCH	13:00	LUNCH				7				

WED: 12.06.2024.

WED-ROOM1		ZOOM LINK WED (12.06) ROOM1(See at the end of Programme)									
SESSION2 (Keynote2)	WED-ROOM1-09:00 CHAIR: Betim Cico	Nabil Abdennadher, University of Applied Sciences and Arts, Western Switzerland (HES-SO), Towards a distributed Continuum Computing platform for Federated Learning Based Self-Adaptive IoT Applications									
BREAK	10:30	BREAK									
SESSION_7	WED-ROOM1-11:00 CHAIRS: Aleksandar S. Dimovski, Antti Rautakoura	Alexander Hoffman, Daniel Mueller-Gritschneider and Ulf Schlichtmann, MuNAS: TinyML Network Architecture Search Using Goal Attainment and Reinforcement Learning	Lejdi Prifti, Betim Cico and Dimitrios Karras, Smart Contract Vulnerability Detection using Deep Learning Algorithms on EVM bytecode	Radmila Koleva, Emil Zaev, Darko Babunski, Damjan Stefanovski and Gerhard Rath, Computational Methods For Water Quality Index Calculation Using Real-Time Measurement System	Antti Rautakoura, Erno Salminen and Timo Hämäläinen, Measuring the SoC development process quality with Fault-slip-Through methodology	Ive Botunac, Natalija Parlov and Jurica Bosna, Opportunities of Gen AI in the Banking Industry with regards to the AI Act, GDPR, Data Act, and DORA	Elvisa Gashi, Dhurate Hyseni, Isak Shabani and Betim Çiço, The advantages of Micro-Frontend architecture for developing web application	Aleksandar S. Dimovski, Shpetim Rexhepi, Goran Velinov and Izet Zeqiri, Semantic Fault Localization for Mutation-based Program Repair			
LUNCH	13:00	LUNCH									
SESSION_9	WED-ROOM1-15:00 CHAIRS: Milan Stork, Marko Santic	Milan Stork and Jaroslav Novak, Application of Artificial Neural Networks for Processing Some Biomedical Data	Radovan Stojanovic, Jovan Djurkovic and Andrej Skraba, ECG and PPG Signals Monitoring by Using Web Audio API	Sabikun Nahar, Ulkarsh Raj, Simon Meckel and Roman Obermaisser, Enhancing Reliability in Organic Computing Using Hormone Guard	Soham Chakraborty, Ayush Roy, Payel Pramanik, Daria Valenkova and Ram Sarkar, A Dual Attention-aided DenseNet-121 for Classification of Glaucoma from Fundus Images	Marco Santic and Francesco Ambesi Impiombato, Identifying sleep monitoring values of the Murata SCA11H based on the Withings-sleep sensor	Radovan Stojanovic, Jovan Djurkovic, Blagoje Babić, Veselin Ivanović, Budimir Lutovac and Milan Stork, A Toolset for Blood Pressure Visualization and Measurement in Time, Frequency and Time-Frequency Domains	Dejan Shishkovski, Damjan Pecioski, Anastasija Ignjatovska, Maja Anackkova and Zlatko Petreski, Modeling and Characterizing of Electrodynamic Shaker ESE 211			
BREAK	17:00	BREAK									
SESSION_11	WED-ROOM1-17:30 CHAIRS: Gehad Alkady, Nevena Radovic	Agon Memeti, Embedding Smart Tech: MVC Blazor Learning Management System with Embedded Computing	Daniel Vratil and Martin Danhel, Comparison of FTA Tools to Develop a Modern Tool for Small Teams and Teaching	Valton Kamberaj, Arbana Kadriu and Nuhi Besimi, Creating the Benchmark Dataset for Ethno-Fusion Music: From Piano Rolls to an Ensemble of Instruments	Maysoon Elhousseiny, Yousef Elsayed, Sarah Khafay, Ziad Zaher, Ramez Daoud, Gehad Alkady, Hassanein Amer and Radovan Stojanovic, Fault-Tolerant Energy Harvesting System for Prolonging Pacemaker Lifetime	Veselin Ivanovic and Nevena Radović, An Extended Local Frequency Estimation-based Optimal Space/Spatial-Frequency Filter: Possibilities for Hardware Implementation and Appropriate Lengths of Registers	Lamir Shkurti and Mennan Selimi, BACA: Bandwidth and CPU-Aware Adaptive Federated Learning for Wireless Environments	Nexhibe Sejfuli-Ramadani, Florim Idrizi, Valentina Angelkoska, Pero Latkoski, Jelena Gjorgjev and Aleksandar Risteski, Advancements and Applications of Blockchain Technology in Diverse Domains: A Literature Review			
SOCIAL	21:00	SOCIAL									
WED-ROOM2		ZOOM LINK WED (12.06) ROOM2 (See at the end of Programme)									
SESSION_8	WED-ROOM2-11:00 CHAIRS: Vincent Mooney, Dragan Golubovic	Emir Turajlic, Multilevel Image Thresholding based on Particle Swarm Optimization Algorithm with Chaotic Cognitive and Social Acceleration Coefficients	Nderim Xhemajli and Zhibert Tafa, Mobile Proxy in Public WiFi Networks: A Tool Against MITM Attacks	Daniel Lamsdale, Andrew Glen, Nick Halafih, Esther Pugh and Akbar Sheikh-Akbari, Comprehensive Commercial RFID Review – Retail Focus	Alenka Lipovec, Charting the Path Forward: Effective Didactic Approach for Teaching AI Literacy in K-12 Education	Olivia Blanchette, Gabrielle Calderon, Andrew Hamby, Jing Liu, Valeria Rubanova and Vincent Mooney, Linguistic Encryption for Underwater Communication	Marjan Krašna and Tomaž Bratina, The use of AI and student population: The change is inevitable	Dragan Golubović, Nenad Vukmirović and Mijko Erić, An Introduction to Vessel Tracking in HFSWRs Based on a High-Resolution Range-Doppler Map: Some Preliminary Results and Challenges	Isak Shabani, Nderon Hiseni, Dhurate Hyseni and Betim Çiço, Optimizing HR Monolithic Systems to Modern HR Systems using Microservices Architecture		
LUNCH	13:00	LUNCH									

SESSION_10	WED-ROOM2-15:00 CHAIRS: Hana Krichene, Saba Akbari	Reza Jafari, Pouria Sarhadi, Amin Paykani, Shady S. Refaat and Pedram Asef, Optimal torque allocation for all-wheel-drive electric vehicles using a reinforcement learning algorithm	Jelena Gjorgjev, Nexhibe Sejfuli-Ramadani, Valentina Angelkoska, Pero Latkoski and Aleksandar Risteski, Use Cases and Comparative Analysis of Blockchain Networks and Layers for DApp Development	Salah Eddine Elgharbi, Messaoud Ait Yahia and Samir Ouchani, Online Phishing Detection: A Heuristic-Based Machine Learning Framework	Saba Akbari, Thiemo Voigt, Rishi Sudhan Vankata Subramanian and Weining Song, Development of Energy Autonomous Wearable Sensor Node for Oxygen Monitoring in Underground Tunnels	Saba Akbari, Thiemo Voigt and Klas Hjort, Capacitance Modelling of Conductive Cotton Knit Fabric for Sensor Node Communication	Hana Krichene and Rohit Prasad, A dataflow architecture with distributed control for DNN acceleration				6
BREAK	17:00	BREAK									
SESSION_12	WED-ROOM2-17:30 CHAIRS: Jens Bielefeldt, Abdiaziz Abdi	Anxhela Gjecka and Majlinda Fetaji, Particle Swarm Optimization-Based Artificial Neural Network for Prediction of Thyroid Disease	Abdullah Havolli and Majlinda Fetaji, A Comparative Analysis of MLR, SVR, and KNN for Improving Quality of Service in Next Generation Network via Machine Learning Regression	Hafsa Laci and Kozeta Sevrani, Preserving privacy in medical images while still enabling AI-driven research: A comprehensive review	Besnik Duriqi, Halil Snopce, Armend Salihu and Artan Luma, An overview of parallel processing of rectangular determinant calculation	Florinda Imeri, Education in STEM and High School Students Views, Career Outlooks, and Interest in IT Fields	Abdiaziz Abdi, Hajar Bennouri and Anthony Keane, Emerging Cyber Risks & Threats in Healthcare Systems: A Case Study in Resilient Cybersecurity	Jens Bielefeldt and Hans-Werner Wiesbrock, DeepTest: Using Machine Learning for Generating new Testsequences			7
SOCIAL	21:00	SOCIAL									
WED-ROOM4		ZOOM LINK WED (12.06) ROOM4 (See at the end of Programme)									
SESSION_22	WED-ROOM4-11:00 CHAIRS:	Projects Dissemination	PELMOB	IoT ECO	MariCybERA	ARCA	Exploring green energy transition potential in Montenegrin transport system				
LUNCH	13:00										
SESSION_23	WED-ROOM4-15:00 CHAIRS:	Projects Dissemination	PELMOB	IoT ECO	MariCybERA	ARCA	Exploring green energy transition potential in Montenegrin transport system				
BREAK	17:00										
SESSION_24	WED-ROOM4-17:30 CHAIRS:										
SOCIAL	21:00	SOCIAL									

THURS: 13.06.2024.

THURS-ROOM1		ZOOM LINK THUR (13.06) ROOM1 (See at the end of Programme)							
SESSION3 (Keynote3)	THURS-ROOM1-09:00 CHAIR: Radovan Stojanovic	Rainer Leupers, RWTH Aachen University, Germany, Multicore Design Technologies and HW Security – From Academia to Industry							
BREAK	10:30	BREAK							
SESSION_13	THURS-ROOM1-11:00 CHAIRS: Nebojsa Arsic, Sanja Bauk	Igor Astrov and Sanja Bauk, Simulating a cyber-attack on an autonomous sea surface vessel's rudder controller	Christos Pergamalis, Eleftherios Tsampanis, Ioannis-Christos Dedes and Charalambos Elias, Hydrogen Fuel Cell Electrical Vehicles (FCEV) - Battery Electric Vehicles (BEV) - Comparison and Future Challenges	Alma Golgota, Securing Durres Port's Digital Transformation: Cybersecurity Strategy for Maritime Industry	Edin Šemić, Emir Nežirić and Samir Vojčić, Calibration of a Single Axis Solar Tracking Mechanism	Semir Mehremić, Safet Isić and Ermin Husak, Development of embedded system for active pendulum tuned mass damper	Branimir Jaksic, Jelena Todorovic, Nebojsa Arsic, Aleksandra Petrovic and Vladimir Maksimovic, Performance of the FSO System Modeled with Gamma - Chi-square Distribution and DPSK and BPSK Modulation Scheme	Mirjana Maksimović, Marko Bošković, Tomislav Šekara and Budimir Lutovac, Exploring Automation Frontiers with the Industrial Metaverse: Potential Benefits and Challenges	Gordana Lastovicka-Medin and Mateusz Rebarz, Interpixel Charge Dynamics in Trench-Isolated Si-Based Sensors
LUNCH	13:00	LUNCH							
SESSION_15	THURS-ROOM1-15:00 CHAIRS: Andrej Mihailovic, Daniele Bernardini	Marco Caccamo and Daniele Bernardini, Service Class Based Management Framework for Photovoltaic Self-Consumption	Milan Stork, Energy Representation of Some Systems Described by Ordinary Differential Equations	Damjan Pecioski, Dejan Shishkovski, Anastasija Angjusheva Ignjatovska, Simona Domazetovska Markovska and Viktor Gavriloski, Modeling and simulation of an electromagnetic energy harvesting system	Leonardo Guiducci, Giulia Palma and Antonio Rizzo, Optimizing Energy Efficiency in Smart Factories: Battery Energy Storage Systems Integration Analysis	Ilir Keka and Betim Cico, The Pattern and Visualization Detection of the Load Profile Data Based on Bootstrap Approach	Milica Sošić and Martin Čalasan, Calculations of Shortening the Lifespan of Distribution Transformer Under Nonlinear Operating Conditions	Velimir Corovic, Veljko Dosljak, Andrej Mihailovic, Milos Jelovac, Milica Muhadinovic, Petar Raicevic, Andrej Bracanovic and Igor Milosevic, Towards a Comprehensive Model for Objectivesdriven Regional Distributions of Electric Vehicle	
BREAK	17:00	BREAK							
SESSION_17	THURS-ROOM1-17:30 CHAIRS: Andrej Mihailovic	ZID'S WORKSHOP (Exploring green energy transition potential in Montenegrin transport system)							
SOCIAL	20:00	CLOSING CEREMONY							
THURS-ROOM2		ZOOM LINK THUR (13.06) ROOM2 (See at the end of Programme)							
SESSION_14	THURS-ROOM2-11:00 CHAIRS: Milan Prokin, Drazen Jurisic	Alberto Galassi, Luigi Pomante and Vitaliano Nardocci, Application of a system-level HW/SW co-design methodology to an industrial embedded system	Zoya Dyka, Ievgen Kabin, Marcin Brzozowski, Goran Panic, Cristiano Calligaro, Milos Krstic and Peter, On the Influence of Cell Libraries and Other Parameters to SCA Resistance of Crypto IP Cores	Vyacheslav Gulvanskii, Maxim Minenko, Georgii Gavrilov, Lev Bratchenko, Zhiron Shen and Dmitrii Kaplun, Calibration Algorithm for a 3D Scanner Based on 2D Lidar and Visible Light Cameras	Dmitrii Minenkov, Alexander Voznesensky, Dianhui Wang and Dmitrii Kaplun, Effective Hardware Implementation of Convolution with Binary Sequences	Ferhat Ozgur Catak and Murat Kuzlu, A Federated Adversarial Learning Approach for Robust Spectrum Sensing	Bojan Cavric, Drazen Jurisic and Budimir Lutovac, Low Power and High Frequency Optimised CCLs for Constant Phase Elements	Dragana Prokin and Milan Prokin, Advanced Battery Management System	Milan Prokin and Dragana Prokin, Regenerative Braking For Fuel Cell Powertrain
LUNCH	13:00	LUNCH							
SESSION_16	THURS-ROOM2-15:00 CHAIRS:	FREE	FREE	FREE	FREE	FREE	FREE	FREE	FREE
BREAK	17:00	BREAK							
SESSION_18	THURS-ROOM2-17:30 CHAIRS:	FREE	FREE	FREE	FREE	FREE	FREE	FREE	FREE
SOCIAL	20:00	CLOSING CEREMONY							

THURS-ROOM4		ZOOM LINK THUR (13.06) ROOM4 (See at the end of Programme)							
SESSION_25	THURS-ROOM4-11:00 CHAIRS:								
LUNCH	13:00	LUNCH							
SESSION_26	THURS-ROOM4-15:00 CHAIRS:								
BREAK	17:00	BREAK							
SESSION_27	THURS-ROOM4-17:30 CHAIRS:								
SOCIAL	20:00	CLOSING CEREMONY							

FRI: 14.09.2024.
EXCURSION (ON SPOT REGISTRATION, NOT INCLUDED BY THE FEE)

ZOOM LINKS:	
ROOM1:	https://us02web.zoom.us/j/3740228367?pwd=apUoFPE7vPLfazootLvtq1s9gQMkV.1
ROOM2:	https://us05web.zoom.us/j/7621096592?pwd=UOjxvfkkbxqA46Y65LKnScHcxoaZtq.1
ROOM4:	https://us04web.zoom.us/j/8702896180?pwd=uJvGVPTI7RzrXY6nTd7ICezkY2BWAZ.1
ROOM3: SS Summer School	https://us06web.zoom.us/j/8342653096?pwd=ZUFOaHppdXVkc1IWRDNTSnNIYmF4UT09

NOTE:	
For details on programme and registration visit	https://mecoconference.me/programme/#logom
Contact via Viber	https://invite.viber.com/?g2=AQAAnmL%2F3aZ6SgFK4eVFIYO%2B1y3SC50MzAc08M7559G12BbUAAE.11EqiIMROCZM
Contact via Wup	https://chat.whatsapp.com/Dfwz7xJdOKI5OIHIQgiiG6
Other info	info@mecoconference.me +38267577057 (Conference phone - urgent issues) Conference taxi: https://www.royaltaxi.me/ +382 67 019 702 info@royaltaxi.me 42.28311848652398, 18.838384938890286 (Venue coordinates)



**CPS&IoT'2024 Summer School on
Cyber-Physical Systems and Internet-of-Things
Budva, Montenegro, June 11-14, 2024, ROOM3 (SS)**

Schedule (in-venue and on-line)

REGISTRATION: Monday (MON), 10 June, 18.00-20:00; Tuesday (TUES), 11 June, 07:45-08:45; Wednesday (WED), 12 June, 08:00-08:45

Day 1, Tuesday 11 June:

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

Title: Opening Ceremony of the CPS&IoT'2024 Summer School, and MECO'2024 and CPS&IoT'2024 Conferences

09:30-10:30 Tarek El-Ghazawi, George Washington University, US

Keynote: The Future of Computing: From ExaFLOPS to Exotic Processor Technologies

10.30-11.00 Break

Title: Introduction to the CPS&IoT'2024 Summer School

11.00-13.00 Lech Józwiak, TU/e, NL

Title: Green CPS and IoT for Green World

13.00-15.00 Lunch Break

Title: Quality-driven Design of Cyber-Physical Systems

15.00-17.00 Nikhil Gaikwad and Sokol Kosta, Aalborg University, DK and Ralf Lübben, Flensburg Univ. of Appl. Sciences, DE

Title: GPU virtualization service for AI at the Edge

17.00-17.30 Break

17.30-19.30 Francesco Ratto, Federico Manca and Claudio Rubattu, UNISS, IT

Title: Adaptive CNN execution on Edge FPGAs

21.00 Dinner

Day 2, Wednesday 12 June:

09.00-10.30 Nabil Abdennadher, Univ. of Applied Sciences, West. Switzerland, CH

Title: Keynote: Towards a Distributed Continuum Computing Platform for Federated Learning Based Self-Adaptive IoT Applications

10.30-11.00 Break

11.00-13.00 Alberto Marchisio and Muhammad Shafique, New York University Abu Dhabi, UAE

Title: Energy-Efficient and Robust Deep Learning for Autonomous Systems

13.00-14.00 Lunch Break

14.00-17.00 Nabil Abdennadher

Title: Distributed Cloud Continuum Platform for Federated Learning Based Self-Adaptive IoT Applications (hands-on and demo tutorial)

17.00-17.30 Break

17.30-18.30 Alberto Marchisio and Muhammad Shafique, New York University Abu Dhabi, UAE

Title: Design Space Exploration of Efficient Quantum Machine Learning Systems

Day 3, Thursday 13 June:

09.00-10.30 Rainer Leupers, RWTH Aachen, DE

Title: **Keynote: Multicore Design Technologies and HW Security – From Academia to Industry**

10.30-11.00 Break

11.00-13.30 Rakshit Mittal and Hans Vangheluwe, University of Antwerp, BE and Rizwan Parveen, Telecom Paris, FR

Title: Modeling a Cruise-Control System Using Open Modelica and Verifying Safety Requirements using UPPAAL (hands-on tutorial)

13.30-14.30 **Lunch Break**

14.30-17.00 Dominique Blouin, Telecom Paris, and Anish Bhowmik, Institut Polytechnique de Paris, FR

Title: Modeling and Synthesizing a Cruise-Control System with AADL using RAMSES (hands-on tutorial)

17.00-17.30 Break

17.30-19.00 Samir Ouchani, CESI, FR

Title: Smart CPS: Ensuring Trustworthiness in Autonomous Decisions through Formal Methods

Day 4, Friday 14 June: (The Break will be within presentations)

09.00-10.30 Christoph Schmittner, AIT, AT

Title: Cyber-Physical System Security: Automated Risk Management with ThreatGet

10.30-12.00 Morayo Adedjouma and Luis Palacios, CEA, FR

Title: Trustworthy Design and V&V of AI-based systems: Case of a Drone Application (includes demo and hands-on)

12.00-13.00 **Lunch Break**

13.00-14.30 Zakaria Chihani, CEA, FR

Title: Trustworthy AI: methods and tools

14.30-16.30 Andrej Škraba, University of Maribor, SI

Title: Overview of Several CPS&IoT Prototypes

16.30-18.30 Radovan Stojanovic, University of Montenegro and MECOnet, ME

Title: An appendix to the design of usable and low-cost nodes for biomedical applications

18.30-19.00 Closing of the CPS&IoT'2024 Summer School

+ Free participation in sessions of the CPS&IoT'2024 Conference and MECO'2024 Conference

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

Day 5, Saturday 15 June: Excursion possible (excursion fee is not included in the summer school fee)

ZOOM LINK:

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

More:

<https://mecoconference.me/ss-cpsiot2024/>