CPS&IoT'2019 Summer School on

Cyber-Physical Systems and Internet-of-Things

Budva, Montenegro, June 10-14, 2019

Schedule

Day 1, Monday 10 June:

09.30-11.00 Lech Jóźwiak - TU/e, NL

Title: Introduction to Modern Cyber-Physical Systems and their Quality-Driven Design

11.00-11.30 Break

11.30-13.00 Henk Corporaal - TU/e, NL

Title: Embedded Processors for Advanced Cyber-Physical Systems

13.00-14.30 Lunch Break

14.30-16.30 Jiri Kadlec - UTIA Prague, CZ

Title: Implementation of HW accelerated video processing on industrial Zynq modules

16.30-17.00 Break

17.00-19.00 Carlo Sau (Università degli Studi di Cagliari) and Claudio Rubattu (Università degli Studi di Sassari, INSA Rennes), IT

Title: Dataflow-Based Toolchain for Adaptive Hardware Accelerators

21.00 Gala Dinner

Day 2, Tuesday 11 June:

09.00-10.30 Eugenio Villar - UNICAN, ES, Jesus Gorroñogoitia and Lara López - ATOS, ES/FR

Title: Megamodeling of complex, distributed, heterogeneous CPS systems

10.30-11.00 Break

11.00-12.30 Marc Geilen - TU/e, NL

Title: Max-plus-linear models for cyber-physical and embedded systems

12.30-14.00 Lunch Break

14.00-15.30 Michael Paulweber - AVL List GmbH, AT

Title: Comprehensive Modular Verification and Validation Framework for automated cyber-physical systems

15.30-17.00 Kim Gruettner and Maher Fakih - OFFIS, DE

Title: Virtual Platforms for Low-power Mixed-criticality Embedded Systems Development and Validation

17.00-17.30 Break

17.30-19.00 Luigi Pomante and Vittoriano Mutillo - UNIVAQ, IT

Title: Design space exploration for hypervisor-based mixed-criticality systems

Day 3. Wednesday 12 June:

09.00-10.30 Axel Jantsch - TU Wien, AT

Title: Self-Aware Cyber-physical Systems

10.30-11.00 Break

11.00-12.30 Dip Goswami, Sajid Mohamed and Sayandip De - TU/e, NL

Title: Tradeoff analysis between Quality-of-Control and degree of approximate computing for image based control systems

12.30-14.00 Lunch Break

14.00-15.30 Radek Fujdiak - Trustport, CZ

Title: Security of Embedded and Cyber-Physical Systems

15.30-17.00 Nicolas Sklavos – Univ. Patras, GR **Title**: Privacy and Security Environments in IoT

17.00-17.30 Break

17.30-19.00 Dino Mustefa - ALTEN, SE and Thomas Nolte - MDH, SE

Title: SafeCOP - safe wireless cooperative CPS

Day 4, Thursday 13 June:

08.30-10.00 Muhammad Shafique - TU Wien, AT

Title: Brain-Inspired Computing for Smart CPS and IoT 10.00-11.30 Christoph Schmittner and Thomas Gruber - AIT, AT Title: Safety & Security Engineering of Automotive CPS

11.30-12.00 Break

12.00-13.30 Lorenzo Strigini and Peter Popov - City University, UK

Title: Probabilistic modelling integrating concerns of safety, security, etc.

13.30-15.00 Lunch Break

15.00-16.00 Keynote Speech

Yervant Zorian, Chief Architect and Fellow at Synopsys, President of Synopsys Armenia

Title: Trends & Challenges in Today's Automotive SOCs

16.00-19.00 Dominique Blouin, Ludovic Apvrille and Maysam Zoor - Paris Telecom, FR

Title: Practical embedded systems modeling and SSP verification with TTool (Hands-on Tutorial)

Participants are expected to come with their own laptop.

Having an internet access is obligatory since (a small) part of the tutorial relies on short videos to watch.

Day 5, Friday 14 June: Excursion (not included in the fee; on own cost of participants), networking and/or team works

+ Free participation in MECO'2019 and ECYPS'2019