CPS&IoT'2020

8th International Conference on Cyber-Physical Systems and Internet-of-Things

Budva, Montenegro, June 8-11, 2020

Call for Papers

SCOPE

Contemporary cyber-physical systems (CPS) are smart compound systems engineered through seamless integration of information processing sub-systems and physical sub-systems. The modern smart collaborating CPS that started to form the Internet of Things (IoT), have important applications in virtually all economic and social segments, and their huge economic and societal impact rapidly increases. The CPS and IoT area undergoes a revolutionary development.

CPS&IoT'2020 Conference addresses all aspects of CPS and IoT, as well as related applications, architectures, enabling technologies, hardware, software, design and development methodologies, and design automation tools. It gives an excellent opportunity to disseminate, publish and discuss fresh research results from international, European, and other R&D projects. Selected conference papers will be invited for publication as extended journal papers in the journal Microprocessors and Microsystems, operated by our strategic partners EUROMICRO and Elsevier. CPS&IoT'2020 Conference together with the collocated CPS&IoT'2020 Summer School constitute a premier Europe based conference event in CPS and IoT.

TOPICS

You are encouraged to *submit papers on all aspects of CPS and IoT, as well as related applications, architectures, enabling technologies, hardware, software, specification, analysis, validation, design and development methodologies, and design automation tools*, that address, but are not limited to, the following **main topic areas:**

- green CPS and IoT
- secure, safe and dependable CPS and IoT
- self-aware, learning and adapting autonomous CPS and IoT
- effective and efficient CPS and IoT
- mobile, wearable, implantable and autonomous (AI-enabled) systems in e.g. automotive, aerospace, aviation, transportation, industry, agriculture, energy, healthcare, personal assistance, environment and safety monitoring and control
- computing platforms (advanced multi-/many-core processors, MPSoCs, SiPs, 3D-SOCs/ SiPs/PoPs, FPGAs), as well as, neuromorphic, in-memory, and approximate computing for CPS and IoT
- (smart) sensors, actuators and MEMS for CPS and IoT
- energy harvesting for CPS and IoT
- (big) data acquisition, storage, fusion, analysis, processing and management for CPS & IoT
- (mobile) vision, signal processing, (deep) learning and other AI for CPS and IoT
- development methodology, development platforms and automated tools for CPS, IoT
- multi-domain modelling, analysis, synthesis, simulation, integration, testing and validation of complex heterogeneous networked systems
- multi-objective and multi-domain co-design and optimization of complex heterogeneous networked systems accounting for energy, performance, safety, security, reliability, etc.
- distribution of information and computations for CPS in cloud, fog, dew and edge computing accounting for real-time availability of information, guaranteed real-time reaction, security, safety, reliability, and minimization of communication traffic, energy consumption, etc.
- coordinated (self-managing, learning and adapting) edge, dew, fog and cloud computing for energy-efficiency, high-performance and guaranteed real-time, security, safety and reliability
- IoT services, communication networks and 5G
- CPS and IoT applications, deployment, experiments and case studies in e.g. automotive, aerospace, aviation, transportation, industry, agriculture, energy, healthcare, personal assistance, environment and safety monitoring and control, etc.
- CPS, IoT and embedded systems environmental, economic and social impact
- CPS, IoT and embedded systems education

A more complete list of topics can be found at: http://embeddedcomputing.me/en/cps-iot-2020#Topics

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Guoqi Xie, Hunan University, CN
Arda Yurdakul, Bogazici University, TR
Yervant Zorian. Synopsys, US
Andrej Žemva, University of Ljubljana, SI

IMPORTANT DATES

Submission deadline: 29 February, 2020
Acceptance notification: 31 March, 2020
Final submission and author registration: 15 April 2020

VENUE

Venue of CPS&IoT'2020 is Hotel Budva*****, Budva, Montenegro.
Budva is a 3500 years old town located at the Adriatic Sea coast of Montenegro. It is a popular touristic destination, with its charming Old Town, beautiful natural environment, 35 clean sandy beaches, and proximity to many famous touristic attractions as Kotor, Boka Kotorska, Sveti Stefan, Dubrovnik, and several national parks. It is an excellent place to have the summer school and conference in a relaxed and friendly atmospheer. For accomodation Hotel Budva***** and Hotel Slovenska Plaza**** are advised, but there are many other accommodation possibilities in Budva. Budva is very well accessible by plane. Podgorica Airport is about 65 km from Budva and it receives regular flights from Vienna, Paris, Rome, Zürich, Frankfurt, Warsaw, Ljubljana, Belgrade, and Instanbul, while Tivat Airport (about 20km from Budva) and Dubrovnik Airport (65km from Budva) are frequent vacation and charter flight destinations. More information can be found at:
http://embeddedcomputing.me/en/meco-2020/place-venue-transport-accomodation

COLLOCATED EVENTS

CPS&IoT'2020 Conference is collocated with CPS&IoT'2020 Summer School and MECO'2020 Conference.

SUBMISSION GUIDELINES

Prospective authors are encouraged to submit their complete full-length papers strictly according to the IEEE Conference Templates EasyChair web-site:

- *IEEE Templates for CPS&IoT'2020 papers [word, latex]*
- *Link to EasyChair submission web-site of CPS&IoT'2020 Conference*

Should an unexpected submission problem be encountered, please contact the Managing Chair Prof. Radovan Stojanović: stox@ac.me.
The standard paper length is 4 pages and a maximum 8 pages. Each extra page above the standard (> 4) is a subject to an additional fee charge.
The CPS&IoT'2020 Proceedings will be submitted to the IEEE Xplore Digital library and main indexing services as SCOPUS, WoS, etc.

MORE INFORMATION

CPS&IoT'2020 Conference
Budva
Montenegro