



# CPS&IoT'2021

## 9<sup>th</sup> International Conference on Cyber-Physical Systems and Internet-of-Things

Budva, Montenegro, June 7-10, 2021

### *Call for Papers*

#### SCOPE

**Modern smart cyber-physical systems (CPS)** that started to form the **Internet of Things (IoT)** have important applications in virtually all economic, social and environmental segments, and their huge impact rapidly increases. Through enabling us to much better control, implement and optimize the physical, social and life systems, modern CPS and IoT technologies deliver a great potential to significantly improve systems used by us or that we are part of.

**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'2021 Conference together with the collocated CPS&IoT'2021 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, and energy harvesting for CPS and IoT
- CPS, IoT and AI for biodiversity protection, global warming and environment pollution reduction, disaster risk reduction, ecosystems protection and recovery, natural resources protection and management, green technologies and industry
- secure, safe and dependable CPS and IoT
- self-aware, learning and adapting autonomous CPS and IoT
- effective and efficient CPS and IoT, and savings due to use of CPS and IoT in physical, social and environmental systems
- 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, intelligent, neuromorphic, in-memory, and approximate computing for CPS and IoT
- artificial intelligence (AI), (deep) learning (DL), (mobile) vision, and advanced signal processing for CPS and IoT
- (big) data acquisition, storage, fusion, analysis, processing and management for CPS & IoT
- (smart) sensors, actuators and MEMS 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 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, fog and cloud computing for energy-efficiency, high-performance and guaranteed real-time, security, safety and reliability
- IoT services, communication networks, 5G and future 6G
- 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, AI, embedded systems and quality education

A more complete list of topics can be found at: <http://embeddedcomputing.meconet.me/cpsiot2021/>



# CPS&IoT'2021

## 9<sup>th</sup> International Conference on Cyber-Physical Systems and Internet-of-Things

Budva, Montenegro, June 7-10, 2021

### Call for Papers

#### CONFERENCE COMMITTEE

##### PROGRAM CHAIR

Lech Józwiak, TU Eindhoven, NL

##### MANAGING CHAIR

Radovan Stojanović, Univ. of Montenegro, ME

##### PROGRAM COMMITTEE

Ludovic Aprville - Paris Telecom, FR  
Neil Audsley, University of York, UK  
Eesa Mohammed Bastaki, Univ. Dubai, AE  
Jürgen Becker, Karlsruhe Inst. Technol., DE  
Lejla Begić Fazlić, Univ. Appl. Sci Trier, DE  
Carlos T. Calafate, Techn. Univ. Valencia, ES  
Zlatan Car, University of Rijeka, HR  
Anupam Chattopadhyay, NTU, SG  
Armando W. Colombo, Univ. Emden-Leer, DE  
Guido Dartmann, Univ. Appl. Sci Trier/RWTH-Aachen, DE  
Miguel Figueroa, Univ. Concepcion, CL  
Masahiro Fujita, University of Tokyo, JP  
Kris Gaj, George Mason University, US  
Roberto Giorgi, University of Siena, IT  
Raffaele Gravina, University of Calabria, IT  
Ilker Hamzaoglu, Sabanci University, TR  
Shiyan Hu, MTU, US  
Axel Jantsch – TU Wien, AT  
Lech Józwiak, TU Eindhoven, NL  
Mehdi Kargahi, University of Tehran, IR  
Paris Kitsos, Univ. of the Peloponnese, GR  
Peter Langendörfer, IHP/BTU Cottbus-Senftenberg, DE  
Francesco Leporati, University of Pavia, IT  
Jan Madsen, DTU, DK  
Michail Maniatakos, NYU Abu Dhabi, AE  
Onur Mutlu – ETH Zurich, CH  
Alexandre S. Nery, Univ. de Brasília, BR  
Jari Nurmi, Tampere Univ. of Technology, FI  
Roman Obermaisser, Siegen University, DE  
Miroslav Pajic, Duke University, US  
Sri Parameswaran, UNSW, AU  
Luigi Pomante - UNIVAQ, IT  
Peter Puschnner, TU Wien, AT  
Davide Quaglia, University of Verona, IT  
Eric Rutten, INRIA Grenoble, FR  
Alberto Sangiovanni-Vincentelli, UC Berkeley, US  
Max M. D. Santos, Fed. Univ. Tech. Paraná, BR  
Majid Sarrafzadeh, UCLA, California, USA  
Muhammad Shafique – TU Wien, AT  
Christoph Schmittner - AIT, AT  
Chi-Sheng Shih, Nat. Taiwan University, TW  
Ioannis Sourdis, Chalmers Univ. Techn., SE  
Radovan Stojanović, Univ. of Montenegro, ME  
Andrej Škraba, University of Maribor, SI  
Hiroyuki Tomiyama, Ritsumeikan Univ., JP  
Martin Törngren, KTH, SE  
Eugenio Villar, University of Cantabria, ES  
Chao Wang, Univ. of Sci and Techn. China, CN  
Guoqi Xie, Hunan University, CN  
Arda Yurdakul, Bogazici University, TR  
Yervant Zorian, Synopsys, US  
Andrej Žemva, University of Ljubljana, SI

#### VENUE



Venue of CPS&IoT'2021 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 atmosphere. For accommodation [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 Istanbul, 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-2021/place-venue-transport-accomodation>

#### COLLOCATED EVENTS

[CPS&IoT'2021 Conference](#) is collocated with [CPS&IoT'2021 Summer School](#) and [MECO'2021 Conference](#).

#### SUBMISSION GUIDELINES

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

- [Link to Submission and Templates for CPS&IoT'2021 papers](#)

**When making submission please select CPSIoT.**

Should an unexpected submission problem be encountered, please contact the Managing Chair Prof. Radovan Stojanović: [stox@ac.me](mailto:stox@ac.me).

The standard paper length is 4 pages and maximum 8 pages. Each extra page above the standard (> 4) is a subject to an additional fee charge.

The CPS&IoT'2021 Proceedings will be submitted to the IEEE Xplore Digital library and main indexing services as SCOPUS, WoS, etc.

#### IMPORTANT DATES

**Submission deadline: 15 February, 2021**

Acceptance notification: 15 March, 2021

Final submission and author registration: 31 March 2021

#### MORE INFORMATION

[CPS&IoT'2021 Conference](#)

[Budva](#)

[Montenegro](#)