

# [Advances in Cyber-Physical Social Networks] [ACPSN2020]

Organized in conjunction with IEEE ICPADS 2020

2-4 December 2020, Hong Kong

Recently, due to the rapid proliferation of sensors and smart devices, a new revolution in communication has been witnessed. The next generation of networks will utilize a wide variety of resources with significant sensing capabilities. Such networks will extend beyond physically linked computers to multimodal information from biological, cognitive, semantic, and social networks. This paradigm shift will involve symbiotic networks of humans, smart devices, and the environment, which is referred to as the Cyber-Physical Social Networks (CPSN). These devices and the network will be constantly sensing, monitoring, and interpreting the environment. The symbiosis of CPSN will have significant implications for both the market for advanced networking infrastructure and the future markets – for nearly 6.0 billion people -- that CPSN will create.

Although many researchers have paid attention to CPSN, CPSN still face many challenges (e.g., architecture, security, privacy, big data analysis, etc.). This workshop solicits papers with novel contributions that address such issues regarding advances in CPSN.

Potential topics include but are not limited to the following:

- Software-defined Networks for CPSN
- Architecture, model and simulation tools for CPSN
- Routing protocol, data dissemination and offloading algorithms design for CPSN
- Security, privacy and trust for CPSN
- Big data mining and analytics for CPSN
- Edge, Cloud and fog computing for CPSN
- Machine learning models and methods for CPSN
- Green computing and sustainable computing for CPSN
- New applications on CPSN

## **Paper Submission and Publication**

Submissions should include author information, abstract, 5-10 keywords, and be in PDF format. Each submission must not exceed 10 pages in the IEEE 8.5" x 11" two-column format with 10-point font, including tables, figures and references. The final version will be limited to 6 pages in IEEE proceedings format for conference papers. Up to 2 extra pages may be purchased. The templates can be found here:

LaTeX: [https://www.computer.org/cms/CPS/app/8x11-2/IEEECS\\_confs\\_LaTeX.zip](https://www.computer.org/cms/CPS/app/8x11-2/IEEECS_confs_LaTeX.zip)

MS Word: <https://www.computer.org/cms/CPS/app/8x11-2/instruct8.5x11x2.doc>

Once accepted, the paper will be included into the IEEE conference proceedings published by IEEE Computer Society Press (indexed by EI). Authors (at least one) of any accepted paper are requested to register at the conference.

## **Important Dates**

Paper submission: Aug. 15, 2020

Notification of Paper Acceptance: Sep. 22, 2020

Camera ready due: Oct. 7, 2020

## **Organization Committee**

### **TPC Chairs**

Huan Zhou, China Three Gorges University, Yichang, China

Mingjun Xiao, University of Science and Technology of China, Hefei, China

Xuxun Liu, South China University of Technology, Guangzhou, China

Dawei Li, Montclair State University, Montclair, USA