

# The 2020 International Workshop on Edge Intelligence for Smart IoT Applications (EISIA 2020)

Organized in conjunction with IEEE ICPADS 2020

2-4 December 2020, Hong Kong

## **Introduction**

Recent years have admittedly witnessed a tremendous growth in the use of Machine Learning (ML) techniques and its applications on IoT devices. Especially, the edge computing and the on-device ML algorithms have empowered the IoT system to fully utilize the built-in sensors to efficiently perform powerful sensing applications (e.g., indoor localization, traffic monitoring, navigation). Meanwhile, with the ubiquitous sensing devices and edge computing infrastructure, how to combine the distributed learning paradigm, e.g., Federated Learning, with edge computing to enable more powerful smart IoT applications, is still an open problem, which worths great efforts to explore.

This workshop is to bring together computer scientists, industrial engineers and researchers to discuss and exchange experimental and theoretical results, novel designs in the areas of edge intelligence for smart IoT applications, especially the federated learning for smart cities, smart sensing, and unmanned vehicles.

Topics of particular interest include (but not limited to):

- \* Edge computing for Smart Sensing
- \* Federated Learning for Heterogeneous devices
- \* Asynchronous Federated Learning
- \* Privacy Preserving for Federated Learning and Edge Computing
- \* Edge assisted Smart Sensing
- \* Large Scale Distributed Learning for Smart City
- \* Federated Learning for Crowdsensing
- \* On-device Learning for unmanned vehicles
- \* New Applications for IoT based on Federated Learning

## **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**

### **General Chairs**

Yanchao Zhao, Nanjing University of Aeronautics and Astronautics, China

Sheng Zhang, Nanjing University, China

### **Program Chairs**

Liang Wang, Nanjing University, China

Yao Liu, Binghamton University, USA