

**Sustainable Communications for Renaissance****Call for Papers****Workshop on Edge Learning for 5G Mobile Networks and Beyond****SCOPE**

Nowadays, standard machine learning approaches require centralizing the training data on a single data center or cloud. Since massive data samples need to be uploaded to the data center, transmission delay can be very high and user privacy is not guaranteed in standard centralized machine learning approaches. However, low-latency and privacy requirements are important in the emerging application scenarios, such as unmanned aerial vehicles, extended reality (XR) services, autonomous driving, which makes centralized machine learning approaches inapplicable. Moreover, due to limited communication resources, it is impractical for all the wireless devices that are engaged in learning to transmit all of their collected data to a data center that uses a centralized learning algorithm for data analytic or network self-organization. Therefore, it becomes increasingly attractive to deploy learning algorithms at edge devices, called edge learning. Suitable topics for this workshop include, but are not limited to, the following areas:

TOPICS OF INTEREST

We seek original completed and unpublished work not currently under review by any other journal/ magazine/conference. Topics of interest include, but are not limited to:

- Secrecy of edge learning algorithms
- Fundamental limits of edge learning systems
- Data compression for edge learning
- Techniques for wireless crowd labelling
- Performance analysis of edge learning networks
- Energy efficiency of implementing machine learning over wireless edge networks
- Over-the-air computation for edge learning
- Ultra-low latency edge learning and inference
- Experiments and testbeds on edge learning
- Privacy and security issues in edge learning
- Edge learning for intelligent signal processing
- Distributed reinforcement learning for network decision making, network control, and management

PAPER SUBMISSION

All papers for Workshops should be submitted via EDAS.
Full instructions on how to submit papers are provided on the IEEE ICC 2023 website:
<https://icc2023.ieee-icc.org/>

Steering Committee

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Important Dates**Paper Submission Deadline:**

20 January 2023

Paper Acceptance Notification:

6 March 2023

Camera Ready and Registration for accepted papers:

15 March 2023

Webpage link

icc2023.ieee-icc.org

