The IEEE International Workshop on Edge Intelligence for 6G Networks (EI) 2021

Organized in conjunction with IEEE IPCCC 2021, Oct. 29-31, 2021 Austin, Texas, USA

6G networks are expected to accommodate a huge number of mobile devices, and provision low latency and context-aware intelligent applications to mobile users in a flexible and efficient manner. To support intelligent applications, such as autonomous driving, smart city surveillance, and virtual reality/augmented reality, cloud services are expected to be pushed to the proximity of mobile devices for service quality assurance. For instance, to facilitate safe autonomous driving, the service delay of most vehicular applications is required to be within milliseconds, and any information delay may result in dangerous on-road accidents. Edge intelligence aims at processing data/computing-intensive tasks at the edge of the network, where a set of mobile devices can work cooperatively for data collection and processing, task offloading, model training, model inference, data analytics via edge caching and training, etc. However, edge intelligence systems have to deal with many challenges. It should support various intelligent applications with distinct quality of service requirements in terms of latency, reliability, accuracy and so on. In addition, the service demands exhibit spatial and temporary dynamics due to traffic burstiness and user mobility. It is of importance to manage the heterogeneous communication, computing, and memory/storage resources which jointly affect the perceived performance of users. The objective of this workshop is to promote the harvest of the benefits in edge intelligence systems for 6G networks by considering the aforementioned challenges. This workshop can serve as a forum for researchers from academia, government, and industries, to exchange ideas, present new results, and provide future visions on these topics.

Topics of interest include but are not limited to:

- Performance analysis of edge intelligence systems
- Cooperative edge caching and business models
- Joint optimization of heterogeneous resources
- SDN and resource virtualization
- Network slicing for edge intelligence
- Task offloading for intelligent applications
- Interaction among device, edge and cloud
- Green edge intelligence systems
- Architecture for edge intelligence systems
- Protocols for edge intelligence systems
- Security and privacy in edge intelligence systems
- Distributed learning in edge intelligence systems
- Data analytics and learning enabled edge intelligence systems

Paper requirements: The workshop accepts only novel, previously unpublished papers. All submissions should be written in English with a maximum paper length of six (6) printed pages (double-column,12-point font) including figures. Please refer to the IEEE formatting instruction for details: http://www.ieee.org/conferences_events/conferences/publishing/templates.html.

EDAS submission link:

https://www.edas.info/newPaper.php?c=28651&track=107671

Important Dates

- Paper submission deadline for the workshops: **August 7, 2021 (Deadline Extended)**
- Paper acceptance: **August 20, 2021**
- Camera-ready Deadline: **September 5, 2021**
- Workshop Date: **October 31, 2021**

Workshop Chairs

Wen Wu, University of Waterloo, Ontario, Canada
Qiang Ye, Minnesota State University, MN, USA
Ning Zhang, University of Winsor, Ontario, Canada