

A4E: AI/ML for Edge/Fog Networks Workshop

IEEE International Conference on Computer Communications

2-5 May 2022 // Virtual Conference

CALL FOR PAPERS

The workshop on AI/ML for/of Edge/Fog Networks (A4E) intends to leverage intelligent decision-making for enabling these resource-constrained devices to serve the IoT applications efficiently at the edge/fog networks. A significant research effort is required on theories, architecture, and algorithms for integrating AI for managing the Fog and Edge networks efficiently. Additionally, different AI/ML algorithms need to be designed, which can efficiently use the heterogeneity of the Edge/Fog networks, while ensuring efficient network performance. This workshop, A4E, intends to leverage technological advancements and techniques in the applications of AI/ML for Fog and Edge networks. A4E encourages the global communication and networking research community to address the issues in applying AI techniques in Fog and Edge networks for enriching the efficient usage and utilization and develop novel AI/ML schemes for the Fog/Edge networks, while considering its heterogeneous architecture. The scope of this workshop includes, but is not limited to, the following topics:

- AI/ML for Smart Healthcare IoT networks
- AI/ML for Smart Agricultural IoT networks
- AI/ML for Smart Transportation IoT and fleet management networks
- AI/ML for Industrial IoT (IIoT) applications
- AI/ML for IoT-based Logistic Network Management
- Energy-efficient federated learning (FL) and deep learning (DL) for IoT
- FL/DL to support streaming applications in IoT Edge Networks
- Dynamic configuration of edge/fog networks using AI/ML
- Light-weight FL/DL Algorithm for IoT Networks
- FL/DL for designing Recommender systems in IoT Applications
- Privacy-preserving FL/DL algorithm for IoT Applications
- Computation offloading with FL/DL in IoT Networks
- Trust, privacy, and security issues for/of AI/ML in Edge/Fog networks
- Offloading method design for Edge/Fog management
- Resource management for Edge/Fog through big data mining
- Intelligent service discovery and recommendation in Edge/Fog
- Composition and collaboration of Edge/Fog services with AI/ML
- Provision, scheduling, and maintenance of intelligent services
- QoS modelling, measurement, and optimization of Edge/Fog services
- Energy optimization and cost minimization of Edge/Fog services
- Distributed data integration of Cloud and Edge/Fog
- Novel applications in Edge/Fog environment
- Emerging architecture/framework/models for AI/ML-enabled Edge/Fog networks

Important Dates

Submission Deadline

December 20, 2021

Notification of Acceptance

February 6, 2022

Camera Ready

February 28, 2022

Workshop Organizers

Dr. Sudip Misra, IIT Kharagpur, India
Dr. Rose Qingyang Hu, Utah State University, USA
Dr. Ying-Chang Liang, UESTC, Chengdu, China
Dr. Arijit Roy, University of Luxembourg
Dr. Ayan Mondal, IIT Indore, India

A4E Workshop



<https://a4e-2022.github.io/>

IEEE INFOCOM 2022



<https://infocom2022.ieee-infocom.org>