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~~
December 30, 2021
(EXTENDED DEADLINE)

Notification of Acceptance
February 6, 2022

Camera Ready
February 28, 2022

Submission Procedure

Submitted papers must represent original material that is not currently under review in any other conference or journal and has not been previously published. Paper length should not exceed 6 pages with standard IEEE conference two-column format (including all text, figures, and references). Please see the Author Information page for submission guidelines in the IEEE INFOCOM 2022. All submitted papers will go through a peer-review process. All accepted and presented papers will be included in the IEEE INFOCOM 2022 proceedings and IEEE Xplore. IEEE reserves the right to exclude an accepted and registered but not presented paper from the IEEE digital library. Please follow the submission link on **https://www.edas.info/N29206** to submit your paper.

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, Luxembourg
Dr. Ayan Mondal, IIT Indore, India

A4E Workshop

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

IEEE INFOCOM 2022

https://infocom2022.ieee-infocom.org