ML4ECS
https://ml4ecs.e-ce.uth.gr/

January 22, 2025 • Barcelona • Spain

CALL FOR PAPERS

The Machine Learning For Edge-Cloud Computing (ML4ECS) workshop invites **the research community to submit expressions of interest to provide a talk based on an extended abstract format** focusing on topics such as (but not limited to):

- ML models to improve overall system performance metrics (such as latency, throughput, energy dissipation, use of green energy, security, etc.) across the Edge-Cloud continuum.
- ML models for efficient and transparent pooling of edge resources, seamless integration with cloud and edge infrastructures, resource configuration optimization, multi-level orchestration, workload migration, security, and anomaly detection.
- Privacy-preserving decentralized learning mechanisms and adaptive networking services.
- Learning mechanisms for sustainable computing with lower carbon intensity in Edge-Cloud operations.
- ML-based Open-source tools and frameworks for large-scale experimentation in edge systems.
- Multi-cluster, multi-domain environments and applications.
- Network communication and optimization across resource-restricted edge environments.
- AI/ML-enabled tools and mechanisms in resource-constrained environments.
- AI/ML-based Joint orchestration of cross-layer data (network, compute, data resources).

The workshop's technical program committee will evaluate papers based on the quality of the submission, its relevance to the workshop's topics, and its potential to ignite discussions about future directions, and solutions related to the mentioned topics. We welcome research papers, case studies, position papers, and demos.

Moreover, we will organize panel discussions at the end of each technical session to allow for a more comprehensive exploration of complex topics and drive active participation from the audience through Q&As.

The workshop will present a Best Talk award, sponsored by the HE CODECO project.

There will be no formal proceedings of the workshop. The authors are free to include the content of the extended abstract in a paper submitted to a journal or conference with proceedings. The presentations will be made publicly available via this website and/or HiPEAC.

IMPORTANT DATES

Extended Abstract submission: October 30, 2024
Author Notification: November 10, 2024
Camera Ready: December 1, 2024

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