

# **Data-Plane Programmability and Edge Network Acceleration in the AI era**

## **\*\*\* NetAccel-AI 2024 CALL FOR PAPERS \*\*\***

### **Aim and Scope**

The *1st International Workshop on Data-Plane Programmability and Edge Network Acceleration* (NetAccel-AI 2024) will be co-hosted at the *25th IEEE International Conference on High Performance Switching and Routing* (HPSR 2024 - <https://hpsr2024.ieee-hpsr.org/>) that will be held from July 22nd to July 24th, 2024 in Pisa, Italy.

This workshop would like to offer a common venue to exchange visions and latest advances in research for professionals and researchers working on the areas of programmable data-planes and acceleration techniques. These topics have become of paramount importance in our era in which network softwarization and automation are mating with the explosion of artificial intelligence in all the applications of telecommunications. In this perspective, there is a constant need to improve performance of both network and computing devices in order to support processing functions with ever increasing requirements in terms of dynamical placement, data-transfer delays and monitoring.

### **Topics of Interest**

The topics of interest for NetAccel-AI 2024 include, but are not limited to:

- Programmable data-plane techniques
- Programmable data-plane languages
- P4 packet processing
- eBPF advanced packet handling
- Kernel bypass technologies
- Hardware acceleration techniques
- GPU acceleration and CPU offloading
- Network function virtualization in accelerated servers
- Smart NIC implementations
- Orchestration of distributed AI functions
- Acceleration and data plane programmability combined
- Distributed computing functions
- Cloud-edge-far-edge continuum
- Accelerated IoT devices
- Accelerated machine learning
- In-band Network Telemetry

### **Important Dates**

Workshop Paper Submission: May 17, 2024

Workshop Notification of Acceptance: June 7, 2024

Camera-ready Submission: June 14, 2024

Workshop Date: TBD (July 22-24, 2024)

### **Paper Submission**

Authors are invited to submit original contributions for presentation at the workshop. All submissions must be written in English. Papers should be up to 6 pages, including references and all other material. They must use the standard IEEE two-column conference template, which can be downloaded from [www.ieee.org/conferences/publishing/templates.html](http://www.ieee.org/conferences/publishing/templates.html). Accepted and presented papers will be included in the IEEE HPSR 2024 Proceedings and published on IEEE Xplore.

**Submission Link:** <https://edas.info/newPaper.php?c=32060&track=124924>

**Workshop Co-Chairs**

Guido Maier (Politecnico di Milano, Italy)

Walter Cerroni (Università degli Studi di Bologna, Italy)

Leonardo Linguaglossa (Telecom Paris, France)