

PAISE 2024: 6th Workshop on Parallel AI and Systems for the Edge

Co-conducted with IPDPS on May 27th, 2024, in San Francisco, California USA.

<https://www.paise.org>

From applications to hardware platforms, Edge computing is rapidly transforming the computing landscape. Based on the program and participation in the past years, and particularly drawing on the detailed feedback from in-person workshop attendees in 2023, PAISE 2024 will balance interaction-focused sessions and traditional technical talks. The objective is to enable organic discussions that augment traditional paper presentations, providing a critically needed opportunity to discuss the current trends and issues, to share visions and opinions, to collect feedback and to discuss solutions covering the following areas of edge computing: **applications** — computer vision, machine learning, analytics, IoT; **data flows** — processing pipeline of data from ingestion to archival, pipeline of AI from learning to inference; **control flows** — parallel and distributed programming models and runtimes for managing constrained resources, cybersecurity; and **infrastructure** — storage, compute, and connectivity conducive to resource-constrained and harsh edge environments.

The workshop will provide a critically needed opportunity to discuss the current trends and issues, to share visions, and to present solutions. The following paper categories are welcome:

- **Full Papers:** Full research papers should describe original work and not simultaneously submitted to another journal or conference, and be 8 pages in length (including all figures, tables and references). The full papers will be presented as 20 min talks, followed by Q&A.
- **Short Papers:** Research papers, positions, visions, concepts, demo descriptions, or practice reports, 4 pages in length (including all figures, tables and references), should contain enough information for the program committee to evaluate whether the submission will generate discussion at the workshop. The short papers will be presented as 10 min talks, followed by Q&A.

Accepted papers will be included in the IPDPS workshop proceedings. For more details on paper submission instructions, please visit the workshop webpage <https://paise.org>. All authors are encouraged (but not required) to prepare and display posters complementing their talk during the entire workshop to allow participants to learn about their work in a non-linear fashion.

List of Topics

AI and IoT Applications at the Edge • Collaborative and Distributed Learning at the Edge • Cyber-Security and Privacy in Edge Computing • DevOps across Edge and Cloud • Data and AI Lifecycle Management across Edge and Cloud • Edge-driven HPC, and HPC-steered Edge Computing • Energy Efficient and Low-power Hardware Architectures for the Edge • Serverless and other Programming Models for Edge • Multitenancy at the Edge • Digital-twins and other applications catalyzed by edge-computing

Important Dates

- **February 14th AOE, 2024:** Submission deadline.
- **February 27th AOE, 2024:** Notification of acceptance.
- **March 7th, 2024:** Camera ready papers due.
- **May 27th, 2024:** Workshop.

