Call for Papers

21st ACM International Conference on Computing Frontiers

May 7th-9th, 2024 Ischia, Naples, Italy
www.computingfrontiers.org

Important Dates

January 11th, 2024 (AoE)
~~**January 8th, 2024 (AoE)**~~
Paper Submission (extended)

February 12th, 2024
Authors Notifications

March 25th, 2024 (AoE)
Camera Ready

Organizing Committee

General Chairs

Claudia Di Napoli
ICAR-CNR, IT

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Politecnico di Torino, IT

Computing Frontiers (CF) is an eclectic, interdisciplinary, collaborative community of researchers investigating emerging technologies in the broad field of computing: Our common goal is to drive the scientific breakthroughs that support society.

CF's broad scope is driven by recent technological advances in wide-ranging fields impacting computing, such as novel computing models and paradigms, advancements in hardware, network and systems architecture, cloud computing, novel device physics and materials, new application domains of artificial intelligence, big data analytics, wearables, and IoT. The boundaries between state-of-the-art and revolutionary innovation constitute the advancing frontiers of science, engineering, and information technology — and are the CF community focus. CF provides a venue to share, discuss, and advance broad, forward-thinking, early research on the future of computing and welcomes work on a wide spectrum of computer systems, from embedded and hand-held/wearable devices to supercomputers and data centers.

Computing Frontiers 2024 is set to be an in-person event, with all papers expected to be presented physically at the conference. Please note that virtual or video presentations will not be an option.

Topics of Interest

We seek original research contributions at the frontiers of a wide range of topics, including novel computational models and algorithms, new application paradigms, artificial intelligence, computer architecture (from embedded to HPC systems), computing hardware, memory technologies, networks, storage solutions, compilers, and environments.

Area of particular interest:
Post-Exascale Computing Approaches, Designs, and Systems
Novel / Emerging Processor Architectures, Memory systems, and Communication Networks
Technological Scaling Limits and Beyond
Novel Materials, CMOS Alternatives, Superconducting Logic
Chiplet Packaging Technology and its Application
Generative AI and LLMs
Large-Scale System Design and Networking
System Software, Compiler Technologies, and Programming Languages
Fault Tolerance and Reliability
Embedded, IoT, and Cyber-Physical Systems
Security
Computers and Society

Submissions

We encourage the submission of both full and short papers containing high-quality research 0describing original and unpublished work. Please check the conference website for complete details (www.computingfrontiers.org/2024).

Short papers may be position papers or may describe preliminary or highly speculative work. Full papers are a maximum of eight (8) (excluding references) and short papers are a maximum of four (4) (including references) double-column pages in **ACM conference format**. Authors may buy up to two (2) extra pages for accepted full papers. Page limits include figures, tables, and appendices, but exclude references for full papers. As the review process is double-blind, the removal of all identifying information from paper submissions is required (i.e., cite your own work in the third person). Papers not conforming to the above submission policies on formatting, page limits, and the removal of identifying information, will be automatically rejected. Authors are strongly advised to submit their papers with the final list of authors in the submission system, as changes may not be feasible at later stages.

No-show policy: **All accepted papers are expected to be presented in person at the conference and at least one full registration is required from a submission author for each accepted paper.** If circumstances arise such that authors are unable to present their papers at the conference, they must contact the PC co-chairs with a proposal for a replacement presenter. A no-show will result in exclusion from the ACM digital library proceedings.

Association for Computing Machinery