CALL FOR PAPERS

20TH ACM INTERNATIONAL CONFERENCE ON COMPUTING FRONTIERS

May 9th-11th, 2023 Bologna, Emilia-Romagna, Italy
www.computingfrontiers.org

Computing Frontiers (CF) is an eclectic, interdisciplinary, collaborative community of researchers who investigate 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 the 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 datacenters.

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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, computer architecture (from embedded to HPC systems), computing hardware, memory technologies, networks, storage solutions, compilers, and environments.

- **Innovative Computing Approaches, Architectures, Accelerators, Algorithms, and Models**
- **Technological Scaling Limits and Beyond**
- **Efficient AI computing**
- **Embedded, IoT, and Cyber-Physical Systems**
- **Large-Scale System Design and Networking**
- **System Software, Compiler Technologies, and Programming Languages**
- **Fault Tolerance and Resilience**
- **Security**
- **Computers and Society**

We strongly encourage submissions in emerging fields that may not fit into traditional categories — if in doubt, please contact the PC co-chairs by email.

SUBMISSION

We encourage the submission of both full and short papers containing high-quality research describing original and unpublished work. Please check the conference website at www.computingfrontiers.org for more details.

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, removal of all identifying information from paper submissions is required (i.e., cite own work in 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: Any 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. A no-show of papers will result in exclusion from the ACM digital library proceedings. 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.

IMPORTANT DATES

Paper submission: February 3rd, 2023 (AoE) (Extended)
Authors Notifications: March 17th, 2023
Camera Ready: March 24th, 2023 (AoE)

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