

CALL FOR PAPERS

2021 COMPUTING FRONTIERS

May 11-13th, 2021 Virtual Event

www.computingfrontiers.org

Computing Frontiers 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 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**
- **Quantum Computing Systems**
- **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We encourage the submission of both full and short papers containing high-quality research describing original and unpublished work. Papers must be submitted through <https://easychair.org/conferences/?conf=cf21>

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 (available online at <https://www.acm.org/publications/proceedings-template>). 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, as changes may not be feasible at later stages.

No-show policy: Any accepted papers are expected to be presented 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.

IMPORTANT DATES (EXTENDED)

Abstract submission deadline: **January 28th, 2021 (AoE)**

Paper submission Deadline: **February 4th, 2021 (AoE)**

Author Notification: March 15th, 2021

Final Papers Due: March 25th, 2021



Association for
Computing Machinery

Advancing Computing as a Science & Profession