CALL FOR PAPERS 2020 COMPUTING FRONTIERS

May 11-13th, 2020 Catania, Sicily, Italy

www.computingfrontiers.org

Computing Frontiers 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 transform society.

CF's broad scope is driven by recent technological advances in wide-ranging fields impacting computing, such as memory hardware and systems, network and systems architecture, cloud computing, novel device physics and materials, power efficiency, new application domains of machine and deep learning and big data analytics, and systems portability and wearability. 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 to supercomputers and datacenters.

ORGANISATION

General Chairs

Maurizio Palesi, Uni. Catania, IT Gianluca Palermo, Politech. di Milano, IT

Program Chairs

Cat Graves, Hewlett Packard Labs, USA Eishi Arima, ITC Uni. Tokyo, JP

Poster/Short Paper Chair Kun-Chih Chen, Nat. Sun Yat-sen Univ.

Artifact Eval Chairs Flavio Vella, Free Univ. Bozen-Bolzano, IT Carlo Sau, Uni. Cagliari, IT

Workshops Chair

Francesca Palumbo, Uni. Sassari, IT Registration Chair

Giuseppe Ascia, Uni. Catania, IT **Publications Chairs**

Josef Weidendorfer, Leibniz SCC, DE Kristian Rietveld, Leiden Uni., NL

Finance Chair Siddhartha Jana, Intel, USA

Local Arr. Chairs Giuseppe Mangioni, Uni. Catania, IT Davide Patti, Uni. Catania, IT Salvatore Monteleone, Uni. Catania, IT

Industry/Sp. Session Chairs

Antonino Tumeo, PNNL, USA Marco Aidinucci, Uni. Torino, IT

Publicity Chairs Salvatore Monteleone, Uni. Catania, IT Anastasiia Butko, LBNL, USA

Web Chairs

Kristian Rietveld, Leiden University, NL Simone Vuotto, Uni. Sassari, IT

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
- Embedded, IoT and Cyber-Physical Systems
- Large-Scale System Design and Networking
- Machine Learning, Deep Learning and Big Data Analytics
- System Software, Compiler Technologies and Programming Languages
- Technological Scaling Limits and Beyond
- Fault Tolerance and Resilience

We strongly encourage submissions in emerging fields that may not fit into traditional categories — if in doubt, 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=cf2020

Short papers describe preliminary or highly speculative work as well as position papers. Full papers are a maximum of eight (8) (excluding references) and short papers a maximum of four (4) double-column pages (including references) in ACM conference format. Authors may buy up to two (2) extra pages for accepted full papers. Page limits include figures, tables and appendices. The review process is double-blind and removal of all identifying information from paper submissions (i.e. cite own work in third person) is required. Papers not conforming to the above submission policies will be automatically rejected. At least one full registration is required from a submission author for each accepted paper. A no-show policy is in effect where any accepted papers must be presented at the conference in order to be included in the ACM digital library proceedings.

IMPORTANT DATES

Paper submission Deadline: **January 28th, 2020** Author Notification: March 15th, 2020 Camera-Ready Papers Due: April 5th, 2020



Advancing Computing as a Science & Profession



- Security
- Computers and Society