# 24<sup>th</sup> IEEE/ACM International Symposium on Cluster, Cloud, and Internet Computing (CCGRID 2024)

https://2024.ccgrid-conference.org/ May 6-9, 2024, Philadelphia, Pennsylvania USA

#### **CALL FOR PAPERS**

The 24th IEEE/ACM International Symposium on Cluster, Cloud, and Internet Computing (CCGrid 2024) is a leading forum for disseminating and discussing research activities and results on a broad range of topics in distributed systems, ranging from computing Clusters to widely distributed clouds and emerging Internet computing paradigms, such as fog/edge computing for Internet of Things (IoT)/big data applications. The conference features keynotes, technical presentations, posters, workshops, and the SCALE challenge featuring live demonstrations.

We solicit original contributions in all aspects of distributed systems and applications in the context of cluster, cloud, and Internet computing environments. Specific topics of interest include but are not limited to the following:

**Track 1: Hardware Systems and Networking:** Sustainable and green computing; architecture, networking of data centers; virtualized hardware (GPUs, tensor processing units, FPGAs); RISC V / Open hardware architectures

Track 2: Software Systems and Platforms (for Cluster, Cloud, and Internet Computing): Programming models and runtime systems; resource management; cluster, cloud, edge, continuum and internet computing scheduling and meta-scheduling techniques; energy-efficient software, applications: policies, methods and tools

Track 3: Artificial Intelligence (AI)/Machine Learning (ML) for Systems and Systems for AI/ML: Techniques, platforms and systems for AI/ML at scale; AI/ML deployment at Edge and Cloud; AI/ML algorithms: statistical learning, natural language processing, computer vision, data mining, multiagent systems, knowledge representation; AI/ML for performance, energy efficiency, and reliability of cluster, cloud and Internet computing systems

Track 4: Future Compute Continuum and Seamless Ecosystems: Internet computing frontiers; future Internet; post- and non-von Neumann computing; novel memory and storage; osmotic computing; cloud economics

**Track 5: Applications and Workflows:** AI applications; Digital Twins; autonomous systems; cyber-physical systems; applications for Cloud to Things continuum; cybersecurity and privacy; workflows

Track 6: Performance Monitoring, Modeling, Analysis, and Benchmarking: Performance metrics and models; analysis of system or application performance; monitoring and evaluation tools; performance management; performance benchmarking; systems performance

**Track 7: Distributed and Parallel Storage Systems:** Storage system design and implementation; data and metadata management; emerging storage technologies and accelerations; data privacy, integrity, security, regulations, and QoS; benchmarking, profiling and empirical evaluations

**Track 8: Education about Cluster, Cloud and Internet Computing:** Curriculum, pedagogy, instructional material and technology for education and training on cluster, cloud, and Internet-scale computing; teaching: systems, methodology, performance and evaluations, virtual laboratory, emerging technologies; experience reports on incorporating HPC and PDC topics into core curricula; cyber professional training; workforce development; educational experiment reproducibility; remote teaching and learning; non-classroom-based training

### PAPER SUBMISSION

Authors are invited to submit papers electronically. Submitted manuscripts should be structured as technical papers and may not exceed 10 letter size (8.5 x 11) pages including figures, tables and references using the IEEE format for conference proceedings. All manuscripts will be reviewed and will be judged on correctness, originality, technical strength, significance, quality of presentation, and relevance to the conference attendees. Papers that meet the conference criteria for reproducibility will be awarded a reproducibility badge.

Submitted papers must represent original unpublished research that is not currently under review for any other conference or journal. Papers determined to be under active review elsewhere will be rejected without review. Submissions received after the due date, exceeding the length limit, or not appropriately structured may also not be considered. Authors may contact the conference chairs for more information. The proceedings will be published through the IEEE Press, USA, and will be made available online through the IEEE and ACM Digital Libraries.

## **General Co-Chairs**

Kirk Cameron, Virginia Tech, USA Jie Wu, Temple University, USA

#### Program Committee Co-Chairs

Xubin He, Temple University, USA Alexandru Iosup, Vrije Universiteit, Netherlands Beth Plale, Indiana University, USA

#### Workshops Co-Chairs

Mohsen Amini, University of Louisiana Lafayette, USA Nitin Auluck, Indian Institute of Technology Ropar, India

## **IMPORTANT DATES**

Papers Due (Abstract): December 4 (November 27), 2023 Papers Due (Final): December 11 (December 4), 2023

Notification of Acceptance: February 12, 2024 Camera Ready Papers Due: March 4, 2024 Conference: May 6-9, 2024