CCGrid 2020

20th IEEE/ACM International Symposium on Cluster, Cloud and Internet Computing

May 11-14, 2020, Melbourne, Australia
http://www.cloudbus.org/ccgrid2020

CALL FOR PAPERS

Tremendous advances in processing, communication and systems/middleware technologies are leading to new paradigms and platforms for computing, 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*. CCGrid is a series of very successful conferences, sponsored by the IEEE Computer Society Technical Committee on Scalable Computing (TCSC) and ACM, with the overarching goal of bringing together international researchers, developers, and users and to provide an international forum to present leading research activities and results on a broad range of topics related to these platforms and paradigms and their applications. The conference features keynotes, technical presentations, posters, workshops, tutorials, as well as the SCALE challenge featuring live demonstrations and the ICFEC 2020 conference.

In 2020, CCGrid will return to Melbourne, Australia, to celebrate its 20th anniversary. CCGrid 2020 will have a special focus on three important issues that are significantly influencing all aspects of Cluster, Cloud, and Internet computing: Adaptive Elastic Computing, Green Computing, and Cyber-Physical Computing. Topics of interest include, but are not limited to:

- **Internet Computing Frontiers:** Edge, Fog, Serverless, Lambda, Streaming. More decentralized approaches to cloud computing. Sensor data streaming and computation on the edges of the network. Function as a Service (FaaS), serverless computing, lambda computing.
- **Architecture, Networking, Data Centers:** Service oriented architectures. Utility computing models. IaaS, PaaS, SaaS, *aaS paradigms. Micro-datacenter, cloudlet, edge, or fog computing infrastructure. Virtualized hardware: GPUs, tensor processing units, FPGAs.
- **Storage and I/O Systems**
- **Programming Models and Runtime Systems**: Programming models, languages, and systems. Virtualization, containers, and middleware technologies.
- **Resource Management and Scheduling**: Resource allocation algorithms, profiling, modeling. Cluster, cloud, and internet computing scheduling and meta-scheduling.
- **Performance Modelling and Evaluation**: Performance models. Monitoring and evaluation tools. Analysis of system/application performance.
- **Cyber-Security and Privacy**: Cloud security and trust. Access control. Data privacy and integrity. Regulation.
- **Sustainable and Green Computing**: Hardware/software/application energy efficiency. Power, cooling and thermal awareness.

- **Applications**: Data Science, Artificial Intelligence, Cyber-Physical Systems and applications to real and complex problems in science, engineering, and business.

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.

Submitted papers must represent original unpublished research that is not currently under review for any other conference or journal. Papers not following these guidelines will be rejected without review and further action may be taken, including (but not limited to) notifications sent to the heads of the institutions of the authors and sponsors of the conference. Submissions received after the due date, exceeding 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 online through the IEEE and ACM Digital Libraries.

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IMPORTANT DATES (TENTATIVE)

Papers Due:	10 December 2019
Notification of Acceptance:	30 January 2020
Camera Ready Papers Due:	25 February 2020