

## Bench'20 Call for Papers

---

2020 BenchCouncil International Symposium on Benchmarking, Measuring and Optimizing (Bench' 20)

Web: <http://www.benchcouncil.org/bench20/index.html>

November 14-16, 2020, Atlanta, Georgia, USA

### ✧ Introduction

Benchmarking, measuring, and optimizing are fundamental human activities. The organizing committee is pleased to invite you to take part in Bench'20 to be held in Atlanta, Georgia, USA. This symposium (Bench'20) is organized by the International Open Benchmarking Council (BenchCouncil). Bench'20 overlaps with SC20 (same place and same time), but it is NOT affiliated with the SC conference. The main themes of Bench'20 are benchmarking, measuring, and optimizing systems and applications in the areas of big data, AI, block chain, HPC, datacenters, IoT, and edge computing.

The Bench conference has three defining characteristics. First, it provides a high-quality, single-track forum for presenting results and discussing ideas that further the knowledge and understanding of the benchmark community as a whole. Second, it is a multi-disciplinary conference. The past conferences attracted the researchers and practitioners from the architecture, systems, algorithms, and applications communities. Third, it includes both invited sessions and contributed sessions.

Regularly, Bench'20 will present the BenchCouncil Achievement Award (\$3000), the BenchCouncil Rising Star Award (\$1000), and the BenchCouncil Best Paper Award (\$1000).

As its duty, BenchCouncil incubates and hosts benchmark projects, and further encourages reliable and reproducible research using the benchmarks from BenchCouncil or other organizations. To this end, we present the BenchCouncil Award for Excellence for Reproducible Research to the papers using all publicly available benchmarks. Each winning paper earns a \$100 prize, maximally up to 12 papers: 4 papers for each category of poster, spotlight, and oral.

### ✧ Call for papers

## Topics

Specific topics of interest include, but are not limited to, the following.

- \*\* Synthetic or real-world data sets of:
- \*\* Benchmark, measurement, and optimization of:
- \*\* Benchmark specifications and open-source implementation reports of:
- \*\* Methodologies, abstractions, metrics, algorithms, and tools in benchmarking, measurement, and optimization for:
- \*\* Benchmark-driven domain-specific co-design of:
- \*\* Test methodologies and systems of:
- \*\* Workload characterization of:
  - Big data
  - AI
  - HPC
  - Machine learning
  - Big scientific data
  - Datacenters
  - Cloud
  - Warehouse-scale computing
  - Mobile robotics
  - Edge and fog computing
  - IoT
  - Block chain
  - Data management and storage
  - Medicine, finance and education

## ✧ Paper Submission:

Papers must be submitted in PDF. For a full paper, the page limit is 15 pages in the LNCS format, not including references. For a short paper, the page limit is 8 pages in LNCS format, not including references. The submissions will be judged based on the merit of the ideas rather than the length. After the conference, the

proceeding will be published by **Springer LNCS (Indexed by EI)**. Please note that the LNCS format is the final one for publishing.

After the acceptance decisions are made, the presentation mode of each paper is determined based on the recommendations as poster, spotlight, or oral. All accepted papers, regardless of presentation mode, appear in the proceedings as full-length papers.

At least one author must pre-register for the symposium, and at least one author must attend the symposium to present the paper. Papers for which no author is pre-registered will be removed from the proceedings.

### **Formatting Instructions**

*LNCS format:*

[LaTeX Template](#)

Please make sure your submission satisfies ALL of the following requirements:

- Paper must be submitted in printable PDF format.
- Please number the pages of your submission.
- The submission must be formatted for black-and-white printers. Please make sure your figures are readable when printed in black and white.
- The submission must describe unpublished work that is not currently under review of any other conference or journal venues.

**Submission site:**

<https://easychair.org/my/conference?conf=bench20#>

✧ Important Dates

Regular submission

Registration of abstract (non-mandatory): July 15, 2020 (Anywhere on Earth)

Paper Submission: Aug 15, 2020 (Anywhere on Earth)

Acceptance Notification: Sep 15, 2020

Camera-ready Version: Nov 1, 2020

✧ Organization

General Chair	Jianfeng Zhan (BenchCouncil and Chinese Academy of Sciences)
TPC Chairs	Felix Wolf (Technical University of Darmstadt) Wanling Gao (ICT, Chinese Academy of Sciences)
Award Committees	Lizy Kurian John (The University of Texas at Austin) D.K. Panda (The Ohio State University) Geoffrey Fox (Indiana University) Jianfeng Zhan (BenchCouncil and Chinese Academy of Sciences)
We welcome the industry leaders as sponsors to provide the honorariums for the following awards.	
BenchCouncil Achievement Award	This award recognizes a senior member who has made long-term contributions to benchmarking, measuring, and optimizing. The winner is eligible for the status of a BenchCouncil Fellow. <b>(\$3,000)</b>
BenchCouncil Rising Star Award	This award recognizes a junior member who demonstrates outstanding potential for research and practice in benchmarking, measuring, and optimizing. <b>(\$1,000)</b>
BenchCouncil Best Paper award Chair	This award recognizes a paper presented at the Bench conferences, which demonstrates potential impact on research and practice in benchmarking, measuring, and optimizing. <b>(\$1,000)</b>
BenchCouncil Award for	BenchCouncil incubates, hosts benchmark projects, and further encourages reliable and reproducible

Excellence for Reproduceable Research	research using the benchmarks from BenchCouncil or other organizations. To that end, we present the BenchCouncil Award for Excellence for Reproducible Research to the papers using all publicly available benchmarks. Each winning paper earns a \$100 prize, maximally up to 12 papers: 4 papers for each category of poster, spotlight, and oral.
Submission Chair	Rui Ren (Cyberspace Security Research Institute Co., Ltd.)
Publicity Chairs	Ali Jannesari (Iowa State University)
	Akihiro Nomura (Tokyo Institute of Technology)
	Chen Zheng (ICT, Chinese Academy of Sciences)
	Zhen Jia (Amazon)
	Biwei Xie (ICT, Chinese Academy of Sciences)

✧ Technical Program Committee

Matthew Bachstein, University of Tennessee, Knoxville  
 Woongki Baek, UNIST  
 David Bermbach, TU Berlin  
 Arne Berre, SINTEF  
 Ben Blamey, Uppsala University  
 K. Selcuk Candan, Arizona State University  
 Florina Ciorba, University of Basel  
 Zhihui Du, Tsinghua University  
 Vladimir Getov, University of Westminster  
 Ryan E. Grant, Sandia National Laboratories  
 Cheol-Ho Hong, Chung-Ang University  
 Yunyou Huang, Guangxi Normal University  
 Sascha Hunold, TU Vienna

Khaled Ibrahim, Lawrence Berkeley National Lab  
Todor Ivanov, Frankfurt Big Data Lab, Goethe University Frankfurt  
Zhen Jia, Amazon  
Nikhil Jain, Lawrence Livermore National Laboratory  
Juby Jose, Intel  
Gwangsun Kim, POSTECH  
Huan Liu, Arizona State University  
Gang Lu, Huawei  
Xiaoyi Lu, The Ohio State University  
Piotr Luszczek, University of Tennessee Knoxville  
Lucas Mello Schnorr, UFRGS  
Benson Muite, University of Tartu  
Bin Ren, Pacific Northwest National Laboratory  
Rui Ren, Cyberspace Security Research Institute Co., Ltd.  
Hyogi Sim, Oak Ridge National Laboratory  
Shuaiwen Leon Song, The University of Sydney  
Salman Zubair Toor, Uppsala University  
Blesson Varghese, Queen's University Belfast, UK  
Feiyi Wang, Oak Ridge National Laboratory  
Lei Wang, ICT, Chinese Academy of Sciences  
Bo Wu, Colorado School of Mines  
Biwei Xie, ICT, Chinese Academy of Sciences  
Jungang Xu, College of Computer and Control Engineering, University of Chinese  
Academy of Sciences  
Chen Zheng, ICT, Chinese Academy of Sciences  
Xiexuan Zhou, Max Plank Institute of Biochemistry