

## BPOE-8 Call for Papers

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The Eighth Workshop on Big Data Benchmarks, Performance Optimization, and Emerging Hardware (BPOE-8)

Web: [http://prof.ict.ac.cn/bpoe\\_8](http://prof.ict.ac.cn/bpoe_8)

Co-located with ASPLOS 2017

April 9, 2017, Xi'an China

### ✧ Introduction

Big data has emerged as a strategic property of nations and organizations. There are driving needs to generate values from big data. However, the sheer volume of big data requires significant storage capacity, transmission bandwidth, computations, and power consumption. It is expected that systems with unprecedented scales can resolve the problems caused by varieties of big data with daunting volumes. Nevertheless, without big data benchmarks, it is very difficult for big data owners to make choice on which system is best for meeting with their specific requirements. They also face challenges on how to optimize the systems and their solutions for specific or even comprehensive workloads. Meanwhile, researchers are also working on innovative data management systems, hardware architectures, operating systems, and programming systems to improve performance in dealing with big data.

This workshop, the seventh its series, focuses on architecture and system support for big data systems, aiming at bringing researchers and practitioners from data management, architecture, and systems research communities together to discuss the research issues at the intersection of these areas.

### ✧ Call for papers

#### Topics

The workshop seeks papers that address hot topic issues in benchmarking, designing and optimizing big data systems. Specific topics of interest include but are not limited to:

**\*\* Big data workload characterization and benchmarking**

- \*\* Performance analysis of big data systems
- \*\* Workload-optimized big data systems
- \*\* Innovative prototypes of big data infrastructures
- \*\*Emerging hardware technologies in big data systems
- \*\*Operating systems support for big data systems
- \*\* Interactions among architecture, systems and data management
- \*\* Hardware and software co-design for big data
- \*\* Practice report of evaluating and optimizing large-scale big data systems

Papers should present original research. As big data spans many disciplines, papers should provide sufficient background material to make them accessible to the broader community.

✧ Paper Submissions:

Papers must be submitted in PDF, and be no more than 8 pages in standard two-column SIGPLAN conference format including figures and tables but not including references. Shorter submissions are encouraged. The submissions will be judged based on the merit of the ideas rather than the length. Submissions must be made through the on-line submission site.

Submission site: <https://easychair.org/conferences/?conf=bpoe8>

Best paper award will be announced at the end of the workshop!

✧ Important Dates

Papers due **February 16, 2017**

Notification of acceptance February 28, 2017

Workshop session April 9, 2017

✧ Program Co-Chair:

Prof. Jianfeng Zhan, Institute of Computing Technology, Chinese Academy of Sciences and University of Chinese Academy of Sciences

Dr. Gang Lu, Beijing Academy of Frontier Science and Technology

Mr. Xinhui Tian, Institute of Computing Technology, Chinese Academy of Sciences and University of Chinese Academy of Sciences

✧ Web and Publicity Chair:

Wanling Gao, ICT, Chinese Academy of Sciences and University of Chinese Academy of Sciences

✧ Program committee

Lei Wang, Institute of computing technology, Chinese Academy of Science

Xu Liu, College of William and Mary

Tilman Rabl, Technical University of Berlin

Bingsheng He, National University of Singapore

Zhen Jia, Princeton University

Xiaoyi Lu, The Ohio State University

✧ Previous Events

BPOE-1, San Jose, California, US (IEEE Big Data 2013), 10.8, 2013

BPOE-2, Guilin, Guangxi, China (CCF HPC China 2013), 10.31, 2013

BPOE-3, Beijing, China (CCF Big Data Technology Conference 2013), 12.5, 2013

BPOE-4, Salt Lake City, Utah (ASPLOS 2014, Nineteenth International Conference on Architectural Support for Programming Languages and Operating Systems), March, 1, 2014

BPOE-5, Hangzhou , China (VLDB 2014, 40th international workshop on very large data bases), Sep, 5, 2014

BPOE-6, Hawai'i, US (VLDB 2015, 41th international workshop on very large data bases), Sep, 4, 2015

BPOE-7, Atlanta, US (ASPLOS'16 ,), April, 3, 2016