The First Workshop on Big Data Benchmarks, Performance Optimization, and Emerging hardware (BPOE 2013)

October 8, 2013 * Co-located with IEEE Big Data 2013 * Silicon Valley, CA, USA

BPOE 2013 will take place during IEEE Big Data 2013 workshops

Important Dates:
Paper submission due: July 30, 2013, 11:59 p.m. PST
Notification to authors: August 30, 2013
Camera-ready files due: September 10, 2013

Workshop Organizers:
Steering committee:
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Andrew Purtell, Intel and Apache Software Foundation
Tilmann Rab, University of Toronto
Jungang Xu, University of Chinese Academy of Sciences
Ben He, University of Chinese Academy of Sciences

Overview:
This is the first workshop addressing the challenge of benchmarks, performance optimization, and emerging hardware of Big Data systems and applications, in conjunction with IEEE Big Data

conference 2013. 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 electrical energy. It is expected that systems with unprecedented scales can resolve the problems caused by varieties of big data with daunting volumes. Nevertheless, owners of Big Data can hardly make choice on which system is most suited for their specific requirements. They also face the challenge on how to optimize the system and their solutions to earn most profits from existing data collection. On the other hand, system researchers and developers are working on new hardware architecture, system models, data management and mining techniques to improve the performance in dealing with Big Data.

Characteristics of Big Data Systems bring unique challenges for system benchmarking, and optimizing, which lead to great opportunities for designing innovative Big Data infrastructure. The BPOE workshop aims at bringing researchers and practitioners in related areas together to discuss the research issues at the intersection of these areas, and also to draw much attention from the general architecture, systems, data management and mining research communities to this new and highly promising field.

HighLights:

This workshop shows the following highlights:

- Bring together big data researchers from communities of architecture, systems, and data management. We will discuss the mutual influences of architectures, systems, and data management.
- Bridge the gap of big data researches and practices between industry and academia. Researchers from universities, institutes, and companies will attend this workshop.
- The Technical Program Committee is comprised of active big data practioners from both industry and academia.

- All accepted papers will be published with the Proceeding of IEEE Big Data conference, and indexed by EI.

Topics:

This workshop welcomes research and industry papers that address fundamental research issues in benchmarking, characterizing, designing and optimizing Big Data systems based on novel hardware and software applications.

Topics of interest include, but are not limited to:

- Benchmarking Big Data, cloud and data center computer systems
- Workload characterization of typical Big Data applications
- Performance analysis and optimization of Big Data systems and applications
- New experimental methodologies discussion: how to synthesizing PB-scale Big Data, simulating 100K-node systems, or even obtaining insights of large-scale systems from small-scale deployments
- Innovative prototypes of Big Data infrastructures
- Practice report of evaluating and optimizing large-scale big data systems
- Emerging software and hardware technologies in Big Data systems
- Application examples and use cases in using cyber-infrastructure for Big Data in sciences and engineering

Paper Submission:

Please submit a full-length paper (upto **8 page IEEE 2-column format**) through the online submission system:

https://wi-lab.com/cyberchair/2013/bigdata13/scripts/submit.php?subarea=S7&undisplay_detail=1&wh=/cyberchair/2013/bigdata13/scripts/ws_submit.php

Papers should be formatted to IEEE Computer Society Proceedings Manuscript Formatting Guidelines (see link to "formatting instructions" below).

Formatting Instructions:

8.5" x 11" (DOC, PDF)

LaTex Formatting Macros