BPOE-5: The Fifth workshop on Big Data Benchmarks, Performance Optimization, and Emerging Hardware

Co-located with VLDB 2014   September 5th, 2014, Hangzhou, 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 fifth 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.

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.

Important dates:

Abstract due: *June 15, 2014*
Papers due: *June 30, 2014*
Notification of acceptance: *July 15, 2014*
Camera-ready: *July 30, 2014*
Workshop session: *September 5, 2014*

Submissions:

Papers must be submitted in PDF. We will accept 12-page papers in Springer LNCS style: http://www.springer.com/computer/lncs?SGWID=0-164-6-793341-0 . The submissions will be judged based on the merit of the ideas. The workshop proceeding will be published by Springer LNCS (indexed by EI). About 3 best papers will be recommended for an IEEE Transaction special issue (pending for approval).

Submissions site: https://www.easychair.org/conferences/?conf=bpoe05