Call for Papers

The 8th International Workshop on Big Data and Cloud Performance (DCPerf’18)
Honolulu, HI, USA, 15-19 April 2018
http://www.ece.ucr.edu/~sren/event/dcperf18/

Cloud data centers are the backbone infrastructure for tomorrow's information technology. Their advantages are efficient resource provisioning and low operational costs for supporting a wide range of computing needs, be it in business, scientific or mobile/pervasive environments. Because of the rapid growth in user-defined and user-generated applications and content, the range of services provided at data centers will expand tremendously and unpredictably. Particularly, big data applications and services, e.g., social and environmental sensing, and IoT monitoring, present a unique class of challenges in the Cloud. In addition, the high volume of mixed workloads and the diversity of services offered render the performance optimization of data centers even more challenging. Moreover, important optimization criteria, such as scalability, reliability, manageability, power efficiency, area density, and operating costs, are often conflicting. The increasing mobility of users across geographically distributed areas adds another dimension to optimizing big data and cloud applications.

The goal of this workshop is to promote a community-wide discussion to identify suitable strategies to enable effective and scalable performance optimizations. We are looking for papers that present new techniques, introduce new methodologies, propose new research directions, or discuss strategies for resolving open performance problems for hosting big data analytics in the cloud.

Topics of interest include (but are not limited to)

- Big data applications and services
  o Emerging IoT applications
  o Data flow management
  o Processing platforms
  o Empirical studies
- Cloud systems
  o Novel architectures
  o Resource allocation
  o Content distribution
  o Evaluation/modeling methodology
- Big data and cloud performance
  o Cost/pricing design
  o Power/energy management
  o Reliability/dependability
  o Performance evaluation/modeling
- Big data in the cloud
  o Intra/Inter communication
  o Network protocols
  o Security
  o Real-time analytics

Important Dates
- Paper Registration and Submission: December 30, 2017
- Notification of Acceptance: February 7, 2018
- Final Manuscript Due: February 28, 2018

Submission Guideline
Manuscripts must be limited to 6 pages in IEEE 8.5x11-inch format. Accepted papers will be published in the combined INFOCOM 2018 Workshop proceedings and will be submitted to IEEE Xplore. Submitted papers may not have been previously published in or be under consideration for publication in another journal or conference. The reviews will be single blinded. Manuscripts should be submitted as PDF files via EDAS (https://edas.info/newPaper.php?c=24213).

Organizing Committee
TPC co-Chairs
Shaolei Ren, University of California, Riverside, USA
Juan F. Pérez, Universidad del Rosario, Colombia

Steering Committee
Jiannong Cao, Hong Kong Polytechnic University, Hong Kong; Alok Choudhary, Northwester University, USA;
Peter Muller, IBM Research Zurich Lab, Switzerland; Martin Schmatz, IBM Research Zurich Lab, Switzerland;
Anand Sivasubramaniam, Penn State University, USA; Larry Xue, Arizona State University, USA