

# First Workshop on Architectures and Systems for Big Data (ASBD 2011)



Held in conjunction with the 12th International Conference on  
Parallel Architectures and Compilation Techniques (PACT)  
October 10, 2011  
Galveston Island, Texas.



<http://research.ihost.com/asbd2011/>

**Submissions deadline:** August 10, 2011; **Author notification:** September 10, 2011

## Workshop Co-Organizers:

Evan Speight, *IBM Research*  
Jian Li, *IBM Research*  
Jichuan Chang, *HP Labs*

## Publicity Chair:

Anthony Hylick, *IBM Research*

## Program Committee:

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*Microsoft Research*  
Chitra Venkatramani, *IBM Research*  
Bo Yang, *IBM Research*  
Lin Zhong, *Rice University*

**Submission format:** All papers should be submitted in PDF format, using 10 point or larger font for text (8 points or larger for figures and tables), total length not to exceed 6 pages.

## Submission website:

<https://www.easychair.org/conferences/?conf=asbd2011>  
(opens April 15, 2011)

Data continue a massive expansion in scale, diversity, and complexity. Data underpin activities in all sectors of society. As informatics is the science of information, analytics is the science of data analysis. Achieving the full transformative potential of big data in this increasingly digital world requires both new data analysis algorithms and a new class of systems and distributed computing environments to handle the dramatic data growth, the lack of structure for much of it and the increasing computational needs of massive-scale analytics.

We are pleased to request papers for presentation at the upcoming 1st Workshop on Architectures and Systems for Big Data (ASBD 2011) held in conjunction with PACT 2011. The workshop will provide a forum for the exchange of research ideas related to all critical aspects of emerging analytics systems including data management software, operating systems, architecture support, and benchmarks and metrics. To encourage discussion between participants, the workshop will include significant time for interactions between presenters and the audience. We plan to have a keynote speaker and/or panel session. We also plan to have selected papers to be published at the SIGARCH Computer Architecture News.

## Topics of interest include but are not limited to:

- Scalable system and network designs for capturing large numbers of concurrent data streams or high bandwidth data streaming
- Data management for vast amounts of unstructured data
- OS, distributed systems and system management support for very large-scale analytics
- Debugging and performance analysis tools for analytics and data-intensive computing
- Programming systems and language support for deep analytics
- Mapreduce and other processing paradigms for analytics
- Processor, memory and system architectures for data analytics
- Benchmarks, metrics and workload characterization for analytics and data-intensive computing
- Accelerators for analytics and data-intensive computing
- Implications of data analytics to mobile and embedded systems
- Energy-efficiency and energy-efficient designs for analytics
- Availability, fault tolerance and data recovery in large-scale data-oriented environments

We encourage both industry and academic researchers to submit their research. Preliminary results of interesting ideas and work-in-progress are welcome. Submissions that are likely to generate vigorous discussion will be favored!