IEEE International Workshop on Foundations of Big Data Computing

In conjunction with HiPC 2015 –
22nd IEEE International Conference on High Performance Computing

Date-Time: 16 December 2015 - Afternoon
Venue: Park Plaza Hotel in Bengaluru, India

www.hipc.org

Scope and Topics:

Big Data computing is playing a significant role in enabling a new class of scientific and business applications. Numerous fields are experiencing an unprecedented increase in the volume and complexity of data necessitating new research explorations on adapting or transforming traditional computational tools and methodologies.

There are several open challenges in Big Data computing that needs to be addressed by the community. What constitutes a “Big Data” problem? What application domains are best suited to benefit from Big Data analytics and computing? What are the traits and characteristics of an application that make it suited to exploit Big Data analytics? How can
Big Data systems and frameworks be designed to allow the integration and analysis of complex data sets? How can research in Big Data Analytics benefit from the latest advances in supercomputing and High Performance Computing (HPC) architectures?

The goal of this workshop is to address questions like these that are fundamental to the advancement of Big Data computing, and in the process, build a diverse research community that has a shared vision to advance the state of knowledge and discovery through Big Data computing.

Topics of interest include research contributions and innovative methods in the following areas (but are not limited to):

- Scalable tools, techniques and technologies for Big Data analytics (e.g., graph and stream data analysis, machine learning and emerging deep learning methods)
- Algorithms and Programming Models for Big Data
- Big Data applications - Challenges and Solutions (e.g., life sciences, health informatics, geoinformatics, climate, socio-cultural dynamics, business analytics, cybersecurity)
- Scalable Big Data systems, platforms, services, and management
- Big Data toolkits, workflows, metrics, and provenance.

We invite paper submissions that describe original research contributions in the area of Big Data computing, and position papers that highlight the potential, challenges and opportunities that arise in Big Data computing. We also invite short papers that describe work-in-progress original research. Regular papers can be up to 8 pages long and short papers can be up to 4 pages long. All submissions will undergo rigorous peer-review by the technical program committee, and accepted manuscripts will appear in the workshop proceedings and will be indexed by IEEE digital library. Authors of the accepted manuscripts will be required to present their work at the workshop proceedings.

All paper submissions are to be made on EasyChair through the following submission link:
https://easychair.org/conferences/?conf=foundationsofbigdata

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Important Dates:

Abstract due (recommended): July 24, 2015
Paper submission deadline: ~~August 1, 2015~~ EXTENDED to August 14, 2015 (**firm deadline**)

Notification of acceptance/rejection: September 15, 2015
Camera-ready paper due: September 30, 2015
Author registration deadline: October 16, 2015

Workshop Organization:

General Chairs:
Dinkar Sitaram (PESIT),
Ananth Kalyanaraman (Washington State University)

Program Chairs:
Madhu Govindaraju (SUNY Binghamton),
Saumyadipta Pyne (CRRao AIMSCS, Hyderabad)

Publicity Chair:
Arindam Pal (TCS Innovation Labs)

Proceedings Chair:
Ren Chen, USC (HiPC proceedings chair)

Industry Liaison:
Avinash Sabharwal (Accenture, Bangalore)

Technical Program Committee:

Gagan Agrawal	The Ohio State University
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