International Symposium on Big Data Computing (BDC 2014)

December 8-11, 2014, London, UK

In conjunction with:
7th IEEE/ACM International Conference on Utility and Cloud Computing (UCC 2014)
http://www.cloudbus.org/bdc2014

Introduction

Rapid advances in digital sensors, networks, storage, and computation along with their availability at low cost is leading to the creation of huge collections of data -- dubbed as Big Data. This data has the potential for enabling new insights that can change the way business, science, and governments deliver services to their consumers and can impact society as a whole. This has led to the emergence of the Big Data Computing paradigm focusing on sensing, collection, storage, management and analysis of data from variety of sources to enable new value and insights.

To realize the full potential of Big Data Computing, we need to address several challenges and develop suitable conceptual and technological solutions for dealing them. These include life-cycle management of data, large-scale storage, flexible processing infrastructure, data modelling, scalable machine learning and data analysis algorithms, techniques for sampling and making trade-off between data processing time and accuracy, and dealing with privacy and ethical issues involved in data sensing, storage, processing, and actions.

The International Symposium on Big Data Computing (BDC) 2014--held in conjunction with 7th IEEE/ACM International Conference on Utility and Cloud Computing (UCC 2014), December 8-11, 2014, London, UK,aims at bringing together international researchers, developers, policy makers, and users and to provide an international forum to present leading research activities, technical solutions, and results on a broad range of topics related to Big Data Computing paradigms, platforms and their applications. The conference features keynotes, technical presentations, posters, workshops, tutorials, as well as competitions featuring live demonstrations.

Scope

Topics of interest include, but are not limited to:

I. Big Data Science
- Analytics
- Algorithms for Big Data
- Energy-efficient Algorithms
- Big Data Search
- Big Data Acquisition, Integration, Cleaning, and Best Practices
- Visualization of Big Data

II. Big Data Infrastructures and Platforms
- Programming Systems
- Cyber-Infrastructure
- Performance evaluation
- Fault tolerance and reliability
- I/O and Data management
- Storage Systems (including file systems, NoSQL, and RDBMS)
- Resource management
- Many-Task Computing
- Many-core computing and accelerators

III. Big Data Security and Policy
- Management Policies
- Data Privacy
- Data Security
- Big Data Archival and Preservation
- Big Data Provenance

IV. Big Data Applications
- Scientific application cases studies on Cloud infrastructure
- Big Data Applications at Scale
- Experience Papers with Big Data Application Deployments
- Data streaming applications

- Big Data in Social Networks
- Healthcare Applications
- Enterprise Applications

IMPORTANT DATES

- Papers Due: September 22nd, 2014 (midnight Anywhere on Earth)
- Notification of Acceptance: October 15th, 2014
- Camera Ready Papers Due: October 31st, 2014

PAPER SUBMISSION

Authors are invited to submit papers electronically. Submitted manuscripts should be structured as technical papers and may not exceed10 letter size (8.5 x 11) pages including figures, tables and references using the CPS format for conference proceedings (print area of 6-1/2inches (16.51 cm) wide by 8-7/8 inches (22.51 cm) high, two-column format with columns 3-1/16 inches (7.85 cm) wide with a 3/8 inch (0.81cm) space between them, single-spaced 10-point Times fully justified text). Submissions not conforming to these guidelines may be returned without review. Authors should submit the manuscript in PDF format and make sure that the file will print on a printer that uses letter size(8.5 x 11) paper. The official language of the meeting is English. All manuscripts will be reviewed and will be judged on correctness, originality, technical strength, significance, quality of presentation, and interest and relevance to the conference attendees. Papers conforming to the above guidelines can be submitted through the BDC 2014 paper submission system (https://www.easychair.org/conferences/?conf=bdc2014).

Submitted papers must represent original unpublished research that is not currently under review for any other conference or journal. Papers not following these guidelines will be rejected without review and further action may be taken, including (but not limited to)notifications sent to the heads of the institutions of the authors and sponsors of the conference. Submissions received after the due date, exceeding length limit, or not appropriately structured may also not be considered. Authors may contact the conference PC Chair for more information. Selected papers from BDC 2014 will be invited to extend and submit to the Special Issue on Many-Task Computing in the Cloud in the IEEE Transaction on Cloud Computing (http://datasys.cs.iit.edu/events/TCC-MTC15/CFP_TCC-MTC15.pdf)

CHAIRS & COMMITTEES

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  - Ilkay Altintas, University of California, San Diego, USA
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  - Amy Apon, Clemson University, USA
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- **Big Data Security and Policy**
  - Bogdan Carbunar, Florida International University
- **Big Data Applications**
  - Dennis Gannon, Microsoft Research, USA

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