Call for Papers

A Special Issue of Journal of Parallel and Distributed Computing: Scalable Systems for Big Data Management and Analytics

Background and Scope
The growth of datasets of massive size, diversity and rates, termed “Big Data”, is accelerated by high-throughput scientific instruments, and mobile and online sensors embedded in our daily lives. Management and analytics of Big Data is critical for achieving scientific and engineering breakthroughs, mining for timely and pertinent information, and decision making. The potential of Big Data can be translated into reality only through development of novel algorithms, effective software platforms to navigate data, and innovative use of hardware infrastructure to scale them. Big Data applications need to be supported not just on HPC systems but also on emerging cyber-infrastructure such as Cloud platforms, and accelerators like GPGPUs, FPGAs and many-core processors. The convergence of Big Data software platforms and accelerated cyber-infrastructure is vital for transformative research. For this special issue, we invite articles on innovative research to address Big Data challenges using novel algorithms, software architectures, emerging computing platforms, and unique approaches. Submissions that pertain to Big Data analytics in any field are relevant to this special issue.

Topics of interest for the special issue include but are not limited to:
- Scalable Big Data Software Platforms
- Big Data applications on Clouds, GPGPUs and Accelerators
- Management and analytics of semi-structured, Graph and Scientific datasets
- Data-intensive workloads on emerging platforms
- Algorithms, approaches and evaluation of Big Data platforms
- Storage and Management of Big Data on Clouds
- Novel Big Data algorithms and applications in all fields of science and engineering.

Submission Format
The submitted papers must be written in English and describe original research which is not published nor currently under review by other journals or conferences. Author guidelines for preparation of manuscript can be found at http://www.elsevier.com/journals/journal-of-parallel-and-distributed-computing/0743-7315/guide-for-authors.

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Submission Guidelines
All manuscripts and any supplementary material should be submitted through Elsevier Editorial System (EES). The authors must select “Special Issue: Big Data Systems & Apps” when they reach the “Article Type” step in the submission process. The EES website is located at: http://ees.elsevier.com/jpdc/default.asp.

Important Dates
Paper submission:
Oct 31, 2013
Acceptance notification:
Jan 31, 2014
Final papers:
Mar 15, 2014

Guide for Authors
This site will guide you stepwise through the creation and uploading of your article. The Guide for Authors can be found on the journal homepage (http://www.elsevier.com/locate/jpdc).

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URL: http://ceng.usc.edu/~simmhan/JPDC-BigData-2013