Big data is an emerging paradigm applied to datasets whose size is beyond the ability of commonly used software tools to capture, manage, and process the data within a tolerable elapsed time. Such datasets are often from various sources (Variety) yet unstructured such as social media, sensors, scientific applications, surveillance, video and image archives, Internet texts and documents, Internet search indexing, medical records, business transactions and web logs; and are of large size (Volume) with fast data in/out (Velocity). Various technologies are being discussed to support the handling of big data such as massively parallel processing databases, scalable storage systems, cloud computing platforms.

Big data is an emerging research area which requires exceptional technologies to efficiently process large quantities of data within tolerable elapsed times. Cloud Computing which promises to accommodate a huge volume of data and its processing is in a position as a promising technology to deal with Big data issues. This special issue is focusing on this new strategic research area to address how to use Cloud Computing to process Big data intensive applications. This special issue will solicit high quality papers in any aspects of data intensive cloud computing, including but not limited to:

- Cloud Architecture in support of data intensive applications
- Volume, Velocity and Variety of Data intensive applications on Cloud
- Resource scheduling and SLA for data intensive processing on Cloud
- Data intensive storage and computation management on Cloud
- Large-scale scientific workflow in support of data intensive processing on Cloud
- Multiple source data processing and integration on Cloud
- Virtualisation and visualisation of data intensive processing on Cloud
- Fault tolerance and reliability for data processing on Cloud
- MapReduce for Big Data processing on cloud
- Distributed file storage of Big Data on Cloud
- Security and privacy in data processing on Cloud

Important Dates

- March 30, 2013  Paper submission deadline
- May 30, 2013  First notification
- July 30, 2013  Revision submission
- August 30, 2013  Second notification
- September 30, 2013  Final version submission

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Paper Submission

Papers submitted to this special issue for possible publication must be original and must not be under consideration for publication in any other journal or conference. Previously published or accepted conference papers must contain at least 30% new material to be considered for the special issue. All papers are to be submitted by referring to http://www.springer.com/computer/journal/607 Please select “Special Issue” under Manuscript Category of your submission. All manuscripts must be prepared according to the journal publication guidelines which can also be found on its website provided above. Papers will be reviewed following the journal standard review process.

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