# *** Call for Papers ***
# Special Issue on Big Data Infrastructure
# IEEE Transactions on Big Data

Data is becoming an increasingly decisive resource in modern societies, economies, and governmental organizations. Big Data is an emerging paradigm encompassing various kinds of complex and large scale information beyond the processing capability of conventional software and databases. Various technologies are being discussed to support the handling of big data such as massively parallel processing databases, scalable storage systems, cloud computing platforms, Hadoop and Spark.  Due to the multisource, massive, heterogeneous, and dynamic characteristics of application data involved in a distributed environment, one of the most important characteristics of Big Data is to carry out computing on the petabyte (PB), even the exabyte (EB)-level data with a complex computing process. Therefore, large-scale scalable Big Data Infrastructure with corresponding programming language support and software models for efficient processing in distributed environments such as cloud is on demand.

In this special issue, we invite articles on innovative research to address challenges of Big Data Infrastructure with emerging computing platforms such as heterogeneous clouds, hybrid architectures, Hadoop or Spark with emphasis on addressing real-time requirements imposed by emerging Big Data applications such as sensing data, e-commerce data, business transactions and web logs, and etc. Topics of interests include, but are not limited to:

- Data sensing and Data fusion
- Scalable data storage and computation management for Big Data
- Resource scheduling, SLA, Fault tolerance and reliability for Big Data
- Multiple source streaming data processing and integration
- Virtualisation and visualisation of Big Data
- Novel programming models and platforms such as MapReduce or Spark for Big Data
- Security and privacy in Big Data processing
- Green, energy-efficient models and sustainability issues for Big Data
- Innovative Cloud infrastructure for Big Data
- Wireless and mobility support in for Big Data
- Scalable software platforms for fast Big Data analytics on heterogeneous and hybrid architectures
- Big Data applications on heterogeneous architectures such as healthcare, surveillance and sensing, e-commerce, and etc.

**Submission Instructions**
Before submitting your manuscript, please ensure you have carefully read the Instructions for Authors for *IEEE Transactions on Big Data* (TBD). The complete manuscript should be submitted through TBD's submission system. To ensure that you submit to the correct special issue, please select the appropriate section in the drop-down menu upon submission. In your cover letter, please also clearly mention the title of the SI.

**Important Dates**
- 30/01/2016        Paper submission due
- 30/03/2016        1st round review due
- 15/05/2016        1st revision due
- 15/06/2016        2nd round review due
- 15/07/2016        2nd revision due
- 30/07/2016        Final due

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