## Special Issue on "Industrial Applications of Big Data and Internet of things"

### Theme and Scope

In the 21th century, with the flourish of Internet, e-commerce, mobile Internet, social network and Internet of things, big data emerged consequently. Industrial big data is a new concept, which refers to the big data generated from industrial information applications in literature. More specifically, it means the data analysis and application in IoT industry. Along with the continuous popularization and application of big data in IoT industry, the future IoT industry will certainly divide into segments showing differentiated business value, including both original data processing enterprises aiming at data collection, classification and processing, and the third party companies focusing on the application integration and business operations, which would perfect the industrial chain of IoT, enhance user experiences and create new revenue. The goal of this special issue on "Industrial Applications of Big Data and Internet of things" is to promote the development and academic communication of big data and IoT and their industrial applications.

In this special issue, we would like to invite researchers who are working on related research issues to contribute high quality papers to further advance peoples' understanding of the relationship among IOT, target applications and advanced big data processing. We welcome both original practical work and review papers.

Topics of interest of this Special Issue include, but are not limited to:

- Basic theory of big data and IoT
- System architecture and infrastructure of big data and IoT: including computing architecture, cloud computing technology and platform, data centre and green computing
- Big data acquisition and pre-processing: including data acquisition, quality management and control, compression, transmission, etc.
- Storage management models, techniques and systems for big data: including storage management models, storage management methods, querying and indexing techniques, stream data processing, distributed file system, distributed database, etc.
- Parallel computation models, frameworks and systems for big data: including models, frameworks and systems of MapReduce, BSP and hybrid parallel computation and programming
- System performance optimization and enhancements for Hadoop: including MapReduce parallel computing frameworks and job shop scheduling optimization, performance optimization of HDFS and HBase, and enhancements for Hadoop
- Methods and algorithms for intelligent computing and analytical mining of big data and IoT: including machine learning, data mining, social network analysis, Web mining and retrieval, Business Intelligence, ranking and recommendation, natural language processing, ontology-based storage management and analytical mining of large-scale semantic data, virtualized analysis and computation, etc.
- Privacy and security of big data and IoT: including data privacy preserving, security detection, encryption and decryption, etc.
- Technical standards for big data and IoT: including data exchange standards and other standards for big data
- System solutions and tool platform for big data and IoT: including system solutions, tool platform and development environment
- Industrial Applications of Big Data and IoT: including application research and system development based on big data and IoT in the field of Internet, science, engineering, commerce, medical care, traffic, government affairs, telecommunications, power system and energy.

### Instructions for Manuscripts

Each paper, written in English, should be no more than 5000 Words, including references and illustrations. More information can be found at http://jit.niu.edu.tw/preparation2.php. All submitted papers will be reviewed by at least three reviewers and selected based on their originality, significance, relevance, and clarity of presentation. The covering letter should indicate the names of the authors and their affiliations, addresses, faxes, and e-mails. Prospective authors should submit full manuscripts with MS Word format .doc, electronically by e-mail to Guest Editor Lei Shu through email: bigdata.iot.apps@outlook.com

## Important dates

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| Manuscript submission deadline: | July 10, 2015 |
| Notification of Acceptance/Rejection/Revision: | Sept 10, 2015 |
| Final Manuscript Due: | Jan. 10, 2016 |
| Tentative Publication Date: | Dec. 31, 2016 |

## Guest Editors

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