In the age of Big Data and Internet of Things the integration of traditional and contemporary intelligent computing techniques continues to play an increasingly vital role in data analysis, real-time control and operation, decision making, and evaluation and forecasting. Many intelligent techniques, such as fuzzy logic and genetic algorithms, were initially proposed to deal with a certain type of datasets, whose success then led to the generalization of many algorithms that can deal with common types of datasets. With the rapid advancement in pervasive computing and integration with big datasets, digital datasets in different formats have been exponentially collected from different organisations and projects. People and organisations often need to deal with these heterogeneous datasets nowadays; hence expect integrated data-centric computing algorithms and/or systems to meet the needs of their business activities. Therefore, integrated data-centric intelligent computing and systems are finding increasingly more applications from community-based business transactions to intelligent transport systems.

This themed special issue is to facilitate the exchange and dissemination of novel algorithms, system design and development, and advanced applications in integrated data-centric intelligent computing and system development in all disciplines. This special issue focuses on applications of intelligent computing (such as neural networks, fuzzy logic, evolutionary computation, particle swarm optimization and so on) and data-centric (such as data mining) approaches to solve increasingly complex problems. Main topics covered in this special issue include, but not limited to:

- Computational intelligence for data analytics and applications
- Intelligent approaches to Internet of Things, cloud computing
- Computational intelligence algorithms for data-intensive applications
- Intelligent data centric solutions for scientific computing in agriculture, geoscience, and biomedicine etc.
- Big data applications in social and business oriented domains such as disaster management, customer behaviour and cyber security etc.
- Emerging and hot computational intelligence topics dealing with massive dataset, such as deep learning, human-like intelligence, virtual and augmented reality

Preference will be given to papers that promote the above approaches in new and complex applications to solve newly tackled practical problems.
Potential authors need to submit paper title and abstract to guest editors, who will select the most suitable papers matching the scope and topics of this special issues. The selected authors will then be invited to submit whole manuscripts to journal website. There will be two rounds of vigorous peer-review process for each submission. More instructions will be available in April/May of 2017. The timeline for this Special Issue is as follows:

**Title and Abstract due:** 31 March 2017  
**Manuscript due:** 30 June 2017  
**First round of review:** 31 October 2017  
**Second round of review:** 15 December 2017  
**Publication:** January 2018 – February 2018 (?)

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