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## Editorial

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Intelligent Data Analysis (IDA), defined as data analysis using computer intelligent systems. IDA reveals implicit, previously unknown, and potentially valuable information or knowledge from large amounts of data (big data). Intelligent big data analytics is an emerging paradigm in the age of big data, analytics, and artificial intelligence. IDA is also a kind of decision support process. Based on artificial intelligence, machine learning, pattern recognition, statistics, database, and visualization technology, IDA automatically extracts valuable information, necessary knowledge, and exciting models from many online data to help decision-makers make the right choices.

The research fields of IDA include high-performance computing, machine learning, computer vision, language recognition, image recognition, natural language processing and expert system, and it is closely related to the popular big data, Internet of things and cloud computing technologies in recent years. It is an essential technical support for intelligent systems. Cloud computing, edge computing and GPU technology are the most important high-performance computing methods, which can be used to accelerate intelligent information processing. The sensor network involved in the Internet of things is an important channel for big data to be captured and transferred. Big data analysis is one of the important technical prerequisites to realize artificial intelligence. In recent years, with the rapid development of intelligent information processing and analysis technology, it has been widely used in many disciplines and industries.

This special issue discusses the development of new intelligent systems and data analysis architectures, methodologies, techniques and applications.

The second part of the Special Issue is entitled, “Intelligent systems and data analysis”. It consists of the following 5 papers.

- Modelling IoT behavior in business processes with BPMN: A Systematic Literature Review
- Sign language recognition for Deaf and Dump people using Convolution Neural Network
- The Refining Word Embeddings with Sentiment Information for Sentiment Analysis
- The implementation of Ocular Health Service System using Android Platform
- Hybrid ALOHA: A low Latency, Energy-Efficient MAC Protocol for Wireless Networks

We hope you will all enjoy reading this Special Issue and will get valuable information about Intelligent systems and data analysis.

#### **Guest Editors**

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