

Editorial

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With today's growing and overloading volume of information, it is becoming tremendously difficult to analyze the huge amounts of data that contain this information. It makes it very strenuous and inconvenient to introduce an appropriate methodology of decision-making fast enough to the point that it can be considered as real-time. The demand for real-time processing information and related data – both structured and unstructured – is on the rise and consequently makes it harder and harder to implement correct decision making at the enterprise level to keep the organization robust and resilient against either manmade threats or natural disasters.

Neural networking and fuzzy systems combined show how Artificial Intelligence (AI) can be driven by these combinations as a trainable system that is more dynamic than static when it comes to machine and deep learning language to deal with both adversary and friendly events in real-time. Dynamic systems of AI that are built around such an innovative approach allows the robots of the future to be more adaptive with mechanisms such as principle adoption, self-organization, and the convergence of global stability from the viewpoint of business and intelligence security needed in today's cyber world. To deal with uncertainty, vagueness, and imprecision problems, fuzzy classification is applied to extend portfolio analysis, scoring methods, customer segmentation and performance measurement, and thus improves managerial decisions.

This special issue aims to provide an open, multidisciplinary forum for recent advances in neural network driven artificial intelligence technologies such as structured fuzzy system and computational neuroscience. We solicited original contributions that have not been published and are not currently under consideration by any other journals. After peer-reviewed procedure, and considered the relevance to the theme of this special issue, we accept 50 papers from the 219 submissions, which include both theoretical studies and state-of-the-art practical applications papers. All the accepted papers are focused on the following topics:

- Artificial Intelligence
- Fussy based AI Algorithms
- Artificial Intelligence Tools and Applications
- Heuristic and AI Planning Strategies and Tools
- Hybrid Intelligent Systems

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- Distributed Frameworks and Middleware for the Internet of Things
- Intelligence in Mobile, Ubiquitous and Pervasive Computing
- Intelligent Cloud Infrastructures
- Intelligent Integration of Data and Processes
- Intelligent Service-Oriented Distributed Systems
- Multi-Agent Approaches to Distributed Computing
- Design and analysis of mobile and wireless networks
- Multimedia over mobile and wireless networks
- New trends on data gathering, processing, and communications
- New trends on malicious behavior detection and analysis
- Robustness and fault tolerance
- Algorithms and techniques for efficient communications
- Modeling and performance evaluation
- Human Computer Interaction and Interface
- Sensor Networks and Embedded Systems

In conclusion, this special issue would not have been possible without the help of many people. As guest editors, we would like to take this opportunity to thank the authors for their contributions and the reviewers for their invaluable comments and timely responses. We also would like to thank the JCMSE Editor-in-Chief and staff for their support during the preparation and production of this special issue.