

Call for Papers



Int. J. of Automation and Control

Special Issue on: "Hybrid Intelligent Techniques: Foundations, Applications and Challenges"

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The modern era of advanced computing is still striving to develop consciousness-based machines. Instead of using a single algorithm/technique, many researchers are turning their attention to hybridising two or more concepts with better feasibility and functionality. Hybrid intelligence is the combination of human intelligence with machine intelligence and their interaction in resolving various tasks. The main advantage of using such a technique is that one sort of intelligence supplements and strengthens the other to solve any real-life problem in a more efficient way. The growing use of hybrid computing in diversified engineering applications makes it an essential tool in the development of products that have implications for human society.

The term "hybrid intelligence" refers to the integration of many useful techniques such as fuzzy logic, neural computing, probabilistic reasoning and evolutionary computation. The uses of this type of intelligence and the development of related systems are determined by the complexity of challenges. Recently, hybrid intelligent systems have become popular due to their capabilities in handling many real-world complex problems involving imprecision, uncertainty, vagueness and high dimensionality. Ranging from various data mining applications to other analytical fields of research, hybrid intelligence has become one of the premier choices for all researchers for solving complex as well as uncertain problems.

The main aim of this special issue is to cover both the theory and applications of various hybrid intelligence techniques in relation to the diversified spanning fields of engineering and its subfields. It aims to provide an intellectual forum for researchers in academia and scientists and engineers from a wide range of application areas to present their latest research findings in hybrid intelligence techniques to identify future challenges in this novel combination of research areas.

Subject Coverage

Suitable topics include hybrid techniques such as:

- Neural networks
- Swarm intelligence
- Evolutionary computation
- Machine learning
- Nature-inspired optimisation
- Fuzzy computation
- Soft computing techniques
- Intelligent algorithms
- in (but not limited to) the following application areas:
 - Signal processing
 - Image processing
 - Pattern recognition
 - Data mining
 - · Bioinformatics

- · Virtual reality and augmented reality
- Internet of Things
- Big data analytics
- Portfolio management
- Approximation
- Forecasting
- Knowledge discovery
- Bio-inspired computing
- Software estimation
- Financial analysis
- Cluster computing

Notes for Prospective Authors

Submitted papers should not have been previously published nor be currently under consideration for publication elsewhere. (N.B. Conference papers may only be submitted if the paper has been completely re-written and if appropriate written permissions have been obtained from any copyright holders of the original paper).

All papers are refereed through a peer review process.

All papers must be submitted online. To submit a paper, please read our Submitting articles page.

Important Dates

Manuscripts due by: 25 February, 2019

Notification of review results: 25 April, 2019

Submission of revised papers: 25 May, 2019

Notification of review result (if required): 25 June, 2019

Submission of revised papers (if required): 25 July, 2019

Notification of final review results: 25 August, 2019