### **Proposed Special Session on**

# Application of soft computing for pattern recognition

At

# 17th International Conference on Intelligent Systems Design and Applications South Asian University, Delhi, India. December 14-16, 2017

#### Introduction and Scope

Soft computing is a collection of methodologies or techniques which has emerged in the last decade as an efficient tool. It provides flexible information processing capabilities for handling real life ambiguous situations. Its aim is to exploit the tolerance for imprecision, uncertainty, approximate reasoning, and partial truth in order to achieve tractability, robustness, low cost solution and close resemblance with human like decision-making. Soft computing is likely to play an important role in science and engineering in the future. The successful applications of soft computing and the rapid growth suggest that the impact of soft computing will be felt increasingly in the coming years. Soft Computing encourages the integration of soft computing techniques and tools into both every day and advanced applications. Pattern recognition is one of the cornerstones of computer science. Pattern recognition is a branch of machine learning that focuses on the recognition of patterns and regularities in data.

The primary aim of this special issue is to publish the highest quality research in application and convergence of the areas of soft computing (i.e., fuzzy logic, neural networks, evolutionary computing, rough sets and other similar techniques) to address real-world complexities with a focus on pattern recognition and machine learning.

### Topics of interest include but are not limited to the following:

- Evolutionary computing
- Artificial immune systems
- Fuzzy Sets
- Uncertainty analysis
- Rough Sets
- Support vector machines
- Artificial neural networks
- Case Based Reasoning
- Hybrid intelligent systems
- Nature inspired computing techniques
- Machine learning
- Ambient intelligence
- Hardware implementations

- Data Mining
- Web Mining
- Image Processing
- Computer Vision
- Bio-informatics
- Information security
- Network security
- Steganography
- Biometry
- Remote sensing
- Medical Informatics
- E-commerce
- Signal Processing
- Control systems

## Special Session Chairs

Chair: Dr Md Rafiul Hassan, Associate Professor, Department of Information and Computer Science, King Fahd University of Petroleum & Minerals, Dhahran, KSA.

Co-Chair: Dr Mustafizur Rahman, Senior Data Scientist, Commonwealth Bank of Australia, Sydney, Australia.

Co-Chair: Dr. Sk Md Mizanur Rahman, Assistant Professor, Department of Information System, CCIS, King Saud University, Riyadh, KSA

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