

# Recent Advances in Machine Learning and Soft Computing

## Guest Editor

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The field of machine learning and soft computing is vast, versatile, and fascinating. Both Machine learning and Soft Computing are the part of intelligent systems, which has already been realized as the most critical components in everyday tools ranging from search engines and credit card fraud detection to stock market analysis. Therefore, the scope of this special issue has been kept wide and following are the topics covered in this special issue (But not limited to):

**Machine Learning Problems:** Classification, regression, recognition, and prediction; Problem solving and planning; Reasoning and inference; Data mining; Web mining; Scientific discovery; Information retrieval; Natural language processing; Design and diagnosis; Vision and speech perception; Robotics and control; Combinatorial optimization; Game playing; Industrial, financial, and scientific applications of all kinds.

**Machine Learning Methods:** Supervised and unsupervised learning methods (including learning decision and regression trees, rules, connectionist networks, probabilistic networks and other statistical models, inductive logic programming, case-based methods, ensemble methods, clustering, etc.); Reinforcement learning; Evolution-based methods; Explanation-based learning; Analogical learning methods; Automated knowledge acquisition; Learning from instruction; Visualization of patterns in data; Learning in integrated architectures; Multistrategy learning; Multi-agent learning.

**Soft Computing:** Fuzzy, Stochastic and Probabilistic computing, Multi objective optimization, Data Mining, Neural computing, Pattern recognition, Expert Systems, Soft Computing Fundamental and Optimization, Soft Computing for Big Data Era, GPU Computing for Machine Learning, Soft Computing Modeling for Perception and Spiritual Intelligence, Soft Computing and Agents Technology, Soft Computing in Computer Graphics, Soft Computing and Pattern Recognition, Soft Computing in Bio-mimetic Pattern Recognition, Data mining for Social Network Data, Spatial

Data Mining & Information Retrieval, Intelligent Software Agent Systems and Architectures, Advanced Soft Computing and Multi-Objective Evolutionary Computation, Perception-Based Intelligent Decision Systems, Spiritual-Based Intelligent Systems, Soft Computing in Industry Applications and other issues related to the Advances of Soft Computing in various applications.

The submissions may be of any form out of the following:

- New algorithms with empirical, theoretical, psychological, or biological justification;
- Experimental and/or theoretical studies yielding new insight into the design and behavior of learning in intelligent systems;
- Applications of existing techniques that shed light on the strengths and weaknesses of the methods;
- New learning tasks (e.g., in the context of new applications) and of methods for assessing performance on those tasks;
- Development of new analytical frameworks that advance theoretical studies of practical learning methods;
- Computational models of data from natural learning systems at the behavioral or neural level; or extremely well-written surveys of existing work.

### **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 at <https://easychair.org/cfp/RAMLSC-2017>**

### **Important Dates**

Submission deadline: 31<sup>st</sup> October, 2017

Acceptance/Rejection notifications: 15th November, 2017

Final papers due: 31<sup>st</sup> December, 2017