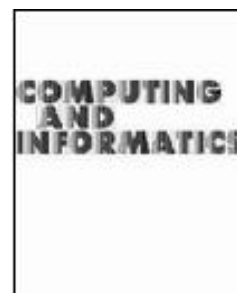

Computing and Informatics

Call for Papers

Special Issue on

Advanced Soft Computing and Knowledge Discovery

Guest Editors: Dr. Lean Yu



In the past decades, the researchers in the field of knowledge discovery and data mining have extensively applied soft computing techniques into classification, regression, clustering, as well as many practical applications. Usually, knowledge discovery and data mining was used by business organizations and researchers to extract useful information from databases. With the rapid increase of enormous databases, many existing knowledge discovery techniques cannot meet the need of practical applications due to the intractable computational complexity. Therefore, some advanced knowledge discovery techniques that are tolerable to imprecision, uncertainty, approximation, and adaptable to ever-changing environments are very desirable.

Relative to conventional hard computing, the basic ideas underlying soft computing is to exploit the tolerance for imprecision, uncertainty, partial truth, and approximation to achieve tractability, robustness and low solution cost for knowledge discovery tasks. Typically, soft computing includes Neural Computing (NC), Fuzzy Logic (FL), Evolutionary Computation (EC) Machine Learning (ML) and Probabilistic Reasoning (PR) etc. It has been demonstrated in many fields that the soft computing methodologies are complementary to many existing theories and technologies.

In order to promote further development of intelligent soft computing and knowledge discovery, the special issue will not be to merely illustrate the superior performance of the soft computing based knowledge discovery method, but also to demonstrate how it can be used effectively in some practical application problems. For this purpose, *Computing and Informatics* will publish a special issue dedicated to the theme of “*Advanced Soft Computing and Knowledge Discovery*”. We cordially invite the authors of papers presented at The 2009 International Joint Conference on Computational Sciences and Optimization (CSO2009), April 24-26, 2009 and The 2nd International Conference on Business Intelligence and Financial Engineering (BIFE2009), July 24-26, 2009, Beijing, China to submit their expanded papers with at least 30% additional materials relative to conference papers to this special issue of the Computing and Informatics. New submissions related to the following topics are welcome.

Topics

This special issue will include, but not limited to the following topics:

- Neural Networks
- Evolutionary computation
- Genetic Algorithms
- Fuzzy Logic
- Inductive Learning
- Kernel Methods
- Swarm Intelligence
- Semisupervised Learning
- Unsupervised Learning
- Reinforcement Learning
- Multi-Agent Learning
- Active Learning
- Instance-Based Learning
- Cooperative Learning

- Meta-Learning
- Bayesian Network.
- Probabilistic Reasoning
- Scalable Algorithms
- Rule Extraction
- Information Retrieval
- Natural Language Processing
- Web Intelligence
- Text Mining
- Social Network Analysis
- Spatial Mining
- Multi-relational Mining
- Soft computing applications in medicine, biology, industry, business, robotics, security, engineering etc...)

All papers will go through the normal refereeing process in accordance with the high standard of Computing and Informatics. Papers should be prepared according to the “Instructions for Authors” on the journal website: <http://www.cai.sk/>. Please submit your papers to Dr. Lean Yu (Email: yulean@gmail.com) no later than October 15, 2009 with a subject of “Computing and Informatics: Special Issue Submission”.

Important Dates

(1) Full papers submission : October 15, 2009	(4) First round revision: April 1, 2010
(2) Relevancy Review and Evaluation: October 30, 2009	(5) Final manuscripts ready: May 15, 2010
(3) First round of peer-review: January 31, 2010	(6) Special issue papers to the publisher: June 1, 2010

For editorial inquiry and correspondence, please contact the Special Issue Editors:

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