

# International Journal of Applied Mathematics and Computer Science

## Special Issue Call for Papers

International Journal of Applied Mathematics and Computer Science welcomes contributions for a special issue:

## Hybrid and Ensemble Methods in Machine Learning

Guest Editors:

- Oscar Cordón, European Centre for Soft Computing, Spain
- Przemysław Kazienko, Wrocław University of Technology, Poland

### OBJECTIVES AND TOPICS

Hybrid and ensemble methods in machine learning have gained a great attention of scientific community over the last several years. Multiple learning models have been theoretically and empirically shown to provide significantly better performance than their single base models. Ensemble algorithms and hybrid methods of reasoning have found their application in various real world problems ranging from person recognition through medical diagnosis and text classification to financial forecasting. *The Special Issue of International Journal of Applied Mathematics and Computer Science* (the journal indexed by ISI, SCI, DBLP, Scopus, Inspec), IF=0.794 in 2010, <http://www.amcs.uz.zgora.pl/>, is devoted to both hybrid and ensemble methods and their application to classification, prediction, and clustering problems. After the success of the 3<sup>rd</sup> Asian Conference on Intelligent Information and Database Systems (ACIIDS 2011) and especially, the Special Session on Multiple Model Approach to Machine Learning (MMAML 2011) at this, we want to offer another opportunity for researchers and practitioners to extend their work and publish recent advances in this area. The scope of the special issue includes the following topics:

- Theoretical framework for ensemble methods
- Ensemble learning algorithms: bagging, boosting, stacking, etc.
- Ensemble methods in clustering
- Dealing with large volumes of data and lack of adequate data
- Model and feature selection in multiple model machine learning
- Diversity, accuracy and stability issues
- Hybrid ensembles
- Hybrid methods in prediction and classification
- Time factor in ensemble models
- Multi-objective ensemble models
- Ensemble methods in agent and multi-agent systems
- Newest methods for generating ensembles
- Implementations of ensemble learning algorithms
- Assessment and statistical analysis of ensemble models
- Applications of ensemble methods in business, engineering, medicine, etc.

### IMPORTANT DATES

Expression of interest, submission of **the tentative title** via *EasyChair*: **August 31, 2011**

**Submission of the paper** for revision via *EasyChair*: **September 30, 2011**

First-round decisions: December 31, 2011

First-round revisions due: January 31, 2012

Second-round decisions: February 29, 2012

Second-round revisions due: March 31, 2012

Final decisions: April 15, 2012

Camera-ready version due: May 31, 2012

Tentative issue description: Vol. 22, No. 3 or 4

## SUBMISSION

The submission of the title is required to form the list of papers and should be send to the *EasyChair* service at <https://www.easychair.org/conferences/?conf=hemml2011>; select “*New Submission*”, mark “*Abstract Only*” at the bottom. Since the abstract is not necessary that time, you may put any text in the *Abstract* field.

Since the special issue is, in a sense, a continuation of the ACIIDS 2011 conference and special session MMAML 2011 in particular, the authors are requested to significantly extend their achievements. **The extended version must contain at least 30% of new content.** Besides, you should also take into account the copyright you have signed for Springer LNAI.

The submission of the paper for the revision should be send in the electronic version (PDF) via *EasyChair* available at <https://www.easychair.org/conferences/?conf=hemml2011>. To be fully considered for publication, papers must be received by the due date and meet the following requirements. Papers must be written in English and the final version should be about 10-15 pages long (incl. figures and tables) in the journal format. The electronic data of the **final** version of papers must be prepared in LaTeX in the AMCS style, see *AMCS class* and *instruction for authors* at <http://www.amcs.uz.zgora.pl/?action=guide>.

All papers submitted will be reviewed by the independent reviewers. However, please note that this invitation does not mean your paper will be automatically accepted for publication.

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