



7th International Conference on Computational Collective Intelligence Technologies and Applications

21-23 September, 2015, Madrid, Spain



EL 2015

Special Session on Ensemble Learning

at the 7th International Conference on Computational Collective Intelligence Technologies and Applications (ICCCI 2015)

Madrid, Spain, September 21-23, 2015

Conference website: <http://antares.sip.ucm.es/iccci2015/>

Special Session Organizers

Prof. Piotr Porwik

Computer Systems Department
University of Silesia
E-mail: piotr.porwik@us.edu.pl

Prof. Michał Woźniak

Department of Systems and Computer Networks
Wrocław University of Technology
E-mail: michal.wozniak@pwr.edu.pl

Objectives and topics

Ensemble learning attempts to enhance the performance of systems (clustering, classification, prediction, feature selection, search, optimization, rule extraction, etc.) by using multiple models instead of using a single one. This approach is intuitively meaningful as a single model may not always be the best for solving a complex problem while multiple models are more likely to yield results better than each of the constituent models. Although in the past, ensemble methods have been mainly studied in the context of classification, but recently they are being used in algorithms in other scenarios such as clustering, fuzzy systems, evolutionary algorithms, dimensionality reduction etc.

The aim of this session is to discuss the new theoretical trends and the applications of ensemble learning and related approaches using hybrid and bio-inspired approaches.

Papers can describe problems and applications related to knowledge discovery, intelligent information and security systems, granular computing, biometrics, etc.

Topics are encouraged, but not limited to, the use of ensemble models to design and develop Intelligent Systems:

- Ensemble clustering
- Ensemble classifiers and ensemble predictors
- Ensemble feature selection/dimensionality reduction
- Ensemble methods for regression, classification, clustering, ranking, feature selection, prediction, etc.
- Selection of constituent models, fusion and diversity of models in an ensemble
- One-class classifier ensembles
- Diversity measures and ensemble pruning
- Classifier ensemble techniques for data stream classification
- Ensemble of evolutionary algorithms
- Hybridization of evolutionary algorithms with other search methods & ensemble methods
- Applications of ensemble of computational intelligence methods in any field.

Important dates

Submission of papers: **20 March 2015**
Notification of acceptance: **15 May 2015**
Camera-ready papers: **15 June 2015**
Conference date: **21-23 September 2015**

Program Committee

Robert Burduk, Wrocław University of Technology, Poland
Krisztian Buza, Budapest University of Technology and Economics, Hungary
Emilio Corchado, University of Salamanca, Spain
José Alfredo F. Costa, Universidade Federal do Rio Grande do Norte, Brazil
Bogusław Cyganek, AGH University of Science and Technology, Poland
Rafał Doroz, University of Silesia, Poland
Marina Gavrilova, University of Calgary, Canada
Manuel Graña, University of País Vasco/EHU, Spain
Francisco Herrera, University of Granada, Spain
Konrad Jackowski, Wrocław University of Technology, Poland
Vassilis Kambouras, Technological Educational Institution of Kavala, Greece
Jacek Koronacki, Institute of Computer Science, Polish Academy of Sciences, Poland
Bartosz Krawczyk, Wrocław University of Technology, Poland
Marek Kurzyński, Wrocław University of Technology, Poland
Leandro Minku, University of Birmingham, UK
José Antonio Saez Muñoz, University of Granada, Spain
Tomasz Orczyk, University of Silesia, Poland
Bartłomiej Placzek, University of Silesia, Poland
Piotr Porwik, University of Silesia, Poland
Alexander Savio, University of the Basque Country, Spain
Dragan Simic, University of Novi Sad, Serbia
Jerzy Stefanowski, Poznań University of Technology, Poland
Ventzeslav Valev, Institute of Mathematics and Informatics, Bulgarian Academy of Sciences, Bulgaria
Michał Woźniak, Wrocław University of Technology, Poland
Krzysztof Wróbel, University of Silesia, Poland
Hujun Yin, University of Manchester, UK
Vesna Zeljkovic, Lincoln University, USA

Submission

All contributions should be original and not published elsewhere or intended to be published during the review period. Authors are invited to submit their papers electronically in pdf format, through EasyChair. All the special sessions are centralized as tracks in the same conference management system as the regular papers. Therefore, to submit a paper please activate the following link and select the track: EL 2015: Special Session on Ensemble Learning.

<https://www.easychair.org/conferences/?conf=iccci2015>

Authors are invited to submit original previously unpublished research papers written in English, of up to 10 pages, strictly following the LNCS/LNAI format guidelines. Authors can download the Latex (recommended) or Word templates available at [Springer's web site](#). Submissions not following the format guidelines will be rejected without review. To ensure high quality, all papers will be thoroughly reviewed by the EL 2015 Program Committee. All accepted papers must be presented by one of the authors who must register for the conference and pay the fee. The conference proceedings will be published by Springer in the prestigious series LNCS/LNAI (indexed by ISI CPCI-S, included in ISI Web of Science, EI, ACM Digital Library, dblp, Google Scholar, Scopus, etc.).