## 5<sup>th</sup> International Workshop on Soft Computing Applications



22-24 August, 2012 Szeged, Hungary



## **CALL FOR PAPERS**

After four successful editions, the 5<sup>th</sup> SOFA is moving to Szeged – Hungary, where it aims to gather as many Soft Computing (SC) researchers and professionals as possible. The main goal of the Workshop is to communicate and publish new theoretical and applicative research results, in the areas of Fuzzy Logic, Neural Networks, Evolutionary Computing, and other methods belonging or connected to SC. A second and just as important goal is to encourage new reflections on SC issues and new links between interested researchers, R&D engineers, managers, etc.

## **Topics**

## **Novel soft computing methods:**

Fuzzy Logic, Neural Networks, Belief Functions, Evidence Theory, Evolutionary Computation, Anytime Algorithms, Hybrid Systems, Probabilistic Reasoning, Possibilistic Reasoning, Clustering Techniques, Feature Selection Methods, Adaptive Modelling, Knowledge Discovery Methods, Novel Learning Algorithms.

#### Intelligent control systems:

Model-Predictive Control, Adaptive and Optimal Control, Intelligent Control Systems, Robotics and Automation, Intelligent Agents & Multiagent Systems, Industrial Automation, Hybrid Control Systems.

# Computational Intelligence for Bioinformatics and Biomedical applications:

Soft Computing Methods for Biological Data Analysis and Knowledge Discovery, Mining the Human Genome, Brain Data Analysis and Modelling, Gene Expression Data Analysis and Disease Profiling, Adaptive Integrated Systems for Medical and Health Applications.

#### **Optimization and Prediction:**

Multi-criteria Optimization, Signal Processing, Time Series Analysis & Prediction, System Identification, Data Mining & Knowledge Discovery, Intelligent Information Systems, Image Processing, Parallel Computing Applications in Identification & Control, Pattern Recognition, Clustering, Classification.

#### **Decision Support Systems:**

Intelligent Databases & Information Retrieval, Case-Based Reasoning, Decision Analysis, Dynamic Systems Modelling, Decision Support Systems, Qualitative and Approximate-Reasoning Modelling, Multiple Criteria Decision Aid.

#### Intelligent Systems for Signal Processing:

Signal Processing, Speech Recognition, Image Analysis, Video Data Modelling, Diagnostics, Uncertaintyhandling, Anytime Algorithms, Sensors, Distributed Measurement, Tool Integration for Better Performance, Virtual Systems, Intelligent Space, Applications

#### **Honorary Chairs:**

Michio Sugeno (Japan) Lotfi A. Zadeh (USA)

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#### **Submissions**

The working language of the conference is English. Prospective authors are invited to submit full papers, of minimum 8 A4 pages including authors' names, affiliations, mailing address, e-mail, telephone and fax numbers, according to the instructions on the website.

## **Important Dates and Deadlines**

Submission of full papers and Special Session proposals – 30 May 2012 Notification of acceptance – 30 June 2012 Submission of final papers and early payment – 20 July, 2012

www.ieee-sofa2012.org

## **Conference Secretariat**

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