



SOFA 2014: Special Session Proposal

Soft Computing Techniques for Time-Series Analysis (SCTTSA – SOFA - 2014)

Chairs: Dr. Alina Barbulescu & Dr. Nicolaie Popescu-Bodorin



The aim of this special session is to present interdisciplinary state-of-the-art results in the fields of Soft Computing and Time Series Analysis and to get together researchers that are active in these two areas. Time Series Analysis is usually time-consuming and computationally intensive, especially when hard computing methods are used. On the contrary soft computing methods (as neural networks, support vector machines, metaheuristics evolutionary computing / genetic programming, fuzzy logic, nonparametric approaches, modeling and prediction techniques) can be used in order to obtain a better balance between speed and accuracy. Submissions reflecting both new theoretical advances and new highly experimental works that use the largest publicly available time-series databases are especially encouraged. A list of potential contributors includes researchers from Romania, Hungary, Poland, China, Coreea, United Kingdom, Japan and USA.

Suggested topics of SCTTSA special session include but are not limited to:

- Soft computing & fuzzy techniques for trend detection;
- Soft computing & fuzzy techniques for detecting seasonality/cyclicality features;
- Soft computing & fuzzy techniques for modeling and prediction of the time-series;
- Soft computing & fuzzy techniques for ensemble prediction;
- Soft computing & fuzzy techniques for spatial data analysis;
- Soft computing & fuzzy techniques for optimization problems;

All of the above topics are considered for any connected field of time-series analysis such as meteorology, finances, hydrology, engineering, financial analysis, market analysis, environmental problems, geophysics, signal processing etc.

Program Committee:

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- Florin Stoica (Lucian Blaga University, Sibiu, RO);
- Romeo Trandafir (Technical University of Civil Engineering, Bucuresti, RO);

For any questions, please contact Alina Barbulescu (alinaemmabarbulescu@gmail.com) and Nicolaie Popescu-Bodorin (bodorin@ieee.org).

Deadline for paper submission: 31 May, 2014

Paper submission: <http://www.sofa2014.org/> (online submission system) & bodorin@ieee.org (backup copy)