

SOFA 2016 - Special Session:

Hybridization of rough sets with bio-inspired optimization techniques

Special Session Organizers:

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Important Dates:

Submission of full papers - 29 April, 2016 Special Session proposals - 29 April, 2016 Notification of acceptance- 16 May, 2016 Submission of final paper and early payment - 22 July, 2016

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Description

Rough set theory is a new mathematical approach to imperfect knowledge. Rough sets have been proposed for a very wide variety of applications. In particular, the rough set approach seems to be important for Artificial Intelligence and cognitive sciences, especially in machine learning, knowledge discovery, data mining, expert systems, approximate reasoning and pattern recognition. The objective of this special session is to showcase the real-world applications of hybridization of rough sets with bio-inspired optimization techniques and other methods of data exploration and approximate computation. The special emphasis will be put on hybrid solutions combining rough sets with other tools, as well as the importance of utilization of domain knowledge in the data mining and data processing solutions.

Scope and Topics

The aim of this special session is provide an opportunity for international researchers to share and review recent advances in the foundations, integration architectures, and applications of bio-inspired optimization techniques with rough set. The special session aims to solicit original, full length original articles on new findings and developments from researchers, academicians and practitioners from industries, in the area of rough set theory, granular computing, knowledge discovery and data mining.

The topics of interest include, but are not limited to:

- Rough set theory
- Rough sets and near sets
- Bio-inspired Rough set
- Data mining
- Rough fuzzy hybridization
- Granular computing theory and applications
- Granular rough-fuzzy networks
- Computing with words
- approximate reasoning
- Machine learning
- Evolutionary computing
- Web intelligence and mining