

Special Session NF_SS7: FUZZY LOGIC, SIMILARITY, CORRELATION AND ASSOCIATION MEASURES

The relationships between fuzzy logic and similarity, correlation, and association measures (SCA, for short) have different aspects. Fuzzy similarity and equivalence relations play important role in hierarchical cluster analysis. Pseudo-difference operations associated with t-conorms are used in construction of association and correlation measures on different domains. Dozens of measures have been introduced for measuring the similarity and correlation between fuzzy sets, intuitionistic fuzzy sets, hesitant fuzzy sets, etc. The goal of the Special Session is to discuss different relationships between fuzzy logic and similarity, correlation, and association measures and to consider application of SCA to different problems.

Topics of interest of the Special Session include but not limited to:

- relationships between fuzzy logic and SCA measures,
- new types of SCA measures,
- SCA measures on new domains,
- theory of aggregation functions and SCA measures,
- applications of SCA measures to cluster analysis,
- analysis of relationships in social network,
- applications of SCA to analysis and forecasting of time series,
- SCA in analysis of co-movements of financial time series,
- SCA in machine learning,
- association rules and data mining.

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