

**2011 IEEE International Conference on Fuzzy Systems
Grand Hyatt Taipei, Taipei, Taiwan**

Call For Papers: Special Session on Evolutionary Fuzzy Systems (SS02)

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Brief Description:

After almost twenty years of efforts towards augmenting fuzzy systems with learning and adaptation capabilities, one of the most prominent approaches to do so has resulted in the emergence of Evolutionary Fuzzy Systems. These kinds of hybrid systems meld the approximate reasoning method of fuzzy systems with the adaptation capabilities of evolutionary algorithms. On the one hand, fuzzy systems have demonstrated the ability to formalize in a computationally efficient manner the approximate reasoning typical of humans. On the other hand, genetic (and in general evolution-inspired) algorithms constitute a robust technique in complex optimization, identification, learning, and adaptation problems. In this way, their confluence leads to increased capabilities for the design and optimization of fuzzy systems.

Objectives and topics:

The aim of the session is to provide a forum to disseminate and discuss recent and significant research efforts on Evolutionary Fuzzy Systems in order to deal with current challenges on this topic. The session is therefore open to any high quality submission from researchers working at the particular intersection of evolutionary algorithms and fuzzy systems. The topics of this special session are as follows:

- Evolutionary Learning/Tuning of Fuzzy Rule-Based Systems
- Evolutionary Selection of Fuzzy Rules
- Evolutionary Fuzzy Systems and the Interpretability-Accuracy Tradeoff
- Multiobjective Evolutionary Fuzzy Systems
- Evolutionary Fuzzy Neural Networks
- Evolutionary Fuzzy Clustering
- Swarm Intelligence with Fuzzy Systems
- Applications of Evolutionary Fuzzy Systems

Important dates:

- Deadline for Papers Submission (according FUZZ-IEEE 2011 initial instructions): January 15, 2011
- By March 31, 2011, authors will receive the notification of acceptance/rejection.
- Deadline for Camera-ready papers: April 30, 2011.

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