



**Call for papers for a special issue of
Information Fusion
An International Journal on Multi-Sensor, Multi-Source Information Fusion
An Elsevier Publication
On
“Methods of Classifier Fusion and Designing Classifier Ensembles
for Hybrid Intelligence Systems”**

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The Information Fusion Journal is planning a special issue devoted to Methods of Classifier Fusion and Designing Classifier Ensembles for Hybrid Intelligent Systems.

Hybrid intelligent systems are becoming popular due to their capabilities in handling many real world complex problems, involving imprecision, uncertainty, vagueness and high-dimensionality. They provide us with the opportunity to use both, our knowledge and raw data to solve problems in a more interesting and promising way. This multidisciplinary research field is in continuous expansion in the artificial intelligence research community.

The idea of designing Multiple Classifier Systems (MCSs) were originally invented as an alternative way of improving performance of classifier systems by exploiting knowledge derived from different sources. Information fusion let overcome limitation of traditional approaches based on single classifiers and opens new areas of researches. Plethora of publications related with different aspects of designing MCSs as well as number of their applications proves growing interests in the domain.

The aim of the issue is to discuss the new theoretical trends and the applications of multiple classifiers concept, information fusion and related approaches which could be useful in designing hybrid intelligent systems.

*Manuscripts (**which should be original and not previously published in full or in past or presented even in a more or less similar form under any other forum**) covering new applications as well as the theories and algorithms dedicated designing multiple classifier systems are invited. Contributions should be described in sufficient detail to be reproducible on the basis of the material presented in the paper.*

Topics are encouraged, but not limited to, the use of fusion and ensemble models to design and develop Hybrid Intelligent Systems:

- *Theoretical foundations of MCSs*
- *Methods for classifier fusion*
- *Ensemble design and classifier selection methods*
- *Methods of decision making based on the information from different sources*
- *Methods of improving qualities of weak classifiers (boosting, bagging, etc.)*
- *Method of measuring and ensuring diversity in classifier ensembles*
- *Designing efficient computational systems for multiple classifiers*
- *Applications*

Manuscripts should be submitted electronically online at <http://ees.elsevier.com/inffus>

The corresponding author will have to create a user profile if one has not been established before at Elsevier. Simultaneously, please also send without fail an electronic copy (PDF format preferred), to the Guest Editor(s) listed below.

Guest Editors

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Deadline for Submission: October, 20, 2010