ISDA 2011 Special Session on

Intelligent Systems for Industrial Processes

Call for papers

Scope

Intelligent Systems are becoming a consolidated discipline which aims at improving various existing approaches in a wide variety of application areas. They shall therefore more and more prove their capabilities in real-world applications, such as those found in many industrial domains. It is clear that the use of Intelligent Systems becomes meaningful only when it aims at solving tough problems. Yet, because of the nature of complex problems, it is often difficult to fairly compare their performance to traditional approaches. Thus managers and decision-makers often find difficult and risky to apply a new technology unless they have a clear indication of its advantages, drawbacks and, most important, the added value the new technology offers. The aim of this special session is to gather contributions showing the effectiveness of Intelligent Systems applied to real-world industrial processes, with the aim to convince decision-makers of the advantages they can get with their use. It is important that the contributions provide a synthetic although clear view of the problem under consideration, together with a clear description of the Intelligent System used. They shall also present a comparison between the proposed approach and the state-of-the-art traditional techniques, preferably clearly stating all the costs (equipment, training, risks) involved and the achievable economical advantages.

Topics

Topics of the special session include (but are not limited to) application of Intelligent Systems for:

- Simulation of industrial processes
- Fault detection and diagnosis
- Monitoring and control of industrial processes
- Product quality inspection and quality controls
- Decision Support Systems for industrial applications
- Analysis and processing of industrial data
- Image analysis in industrial applications
- Development of hybrid intelligent systems for industrial applications

Paper Submission: Please follow the instructions given at the corresponding section.

Conference website http://www.uco.es/isda2011/

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