



## New Directions in Rough Sets and Near Sets

### -RSNS2010-

Under the framework of the 10<sup>th</sup> IEEE International Conference on Intelligent Systems Design and Applications, ISDA'10  
November 29 – December 1, 2010, Cairo, Egypt  
Conference web page: <http://cig.iet.unipi.it/isda2010/>

#### Workshop Chairs

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**Introduction:** Rough set theory, proposed by Zdzislaw Pawlak in 1981, has been attracting researchers and practitioners in various fields of mathematics, science, engineering and technology. The impact of the theory of rough sets and their applications has grown steadily since its inception and is still growing. The simple yet powerful rough set approach to set approximation has become the basis for original developments in both theoretical research in areas such as logic, algebra and topology, and applied research that includes, artificial intelligence and approximate reasoning, data mining and knowledge discovery, decision theory, image processing and pattern recognition to name a few. This research has led to many real life applications in diversified areas such as biology, bioinformatics, chemistry, economics, computer and electrical engineering, environment, finance, medicine, political analysis, robotics, and even art and culture. Near sets stem from a generalization of traditional rough set theory. Near set theory provides methods that can be used to extract resemblance information from objects contained in disjoint sets, i.e., it provides a formal basis for the observation, comparison, and classification of objects. Near sets offer an ideal framework for solving problems based on human perception that arise in areas such as image processing, computer vision as well as engineering and science problems

#### Selected RSNS Workshop Topics

- Rough sets in information retrieval
- Rough sets in data mining
- Rough Sets in information security
- Rough hybrid techniques
- Rough sets in pattern recognition
- Near sets in swarm intelligence
- Near sets in image analysis and computer vision
- Near sets in object recognition
- Near sets in perceptual computing
- Near sets in tolerance spaces

- Rough sets in Bioinformatics

## **International Program Committee**

**TBA**

### **Instructions for Authors:**

Papers must correspond to the requirements detailed in the (Paper Submission) on the conference flyer <http://cig.iet.unipi.it/isda2010/flyer.pdf> The ISDA 2010 Proceedings will be included in the [IEEE Xplore digital library](#). Before publishing your final work at IEL, we need your kind help to ensure the availability and the compatibility of your camera-ready paper.

### **Registration Fees:**

All papers must be presented by one of the authors, who must pay the registration fees.

<http://cig.iet.unipi.it/isda2010/>

### **Paper Reviewing and Publication**

Submitted papers will be reviewed. Accepted papers, which should not exceed 6 pages (PDF) following the double column IEEE format. All accepted papers will be published in the proceedings of the IEEE-ISDA'10. Selected papers will be published in special issues of a selection of International Journals (to be announced).

### **Tentative Dates of Submission and Acceptance**

- Deadline for paper submission June 26, 2010
- Notification of acceptance August 14, 2010
- Camera-ready manuscript submission September 15, 2010