

# Nature Inspired Models for Industrial Applications (NIMIA'2010)

Under the framework of the 10<sup>th</sup> 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:** Computing models inspired by biology is a way to make use of concepts, principles and mechanisms underlying biological systems. This type of computing includes among others, fields as evolutionary algorithms, neural networks, molecular computing and quantum computing. The special workshop is soliciting papers on *all aspects of Bio-inspired Models applied to the field of Industrial Applications*. Because of the interdisciplinary character of the conference a special effort will be made to solicit survey, review, and tutorial papers which would make research trends in a given subarea more accessible to the broad audience of the conference. The **scope** of this special workshop covers the following bio-inspired models and related techniques and their industrial applications:

### Relevant intelligent techniques:

- Evolutionary Computing
- Swarm intelligence
- Neurocomputing
- Immunological Computing
- Hybrid Methods
- Intelligent Agents and Agent Theory
- Other topics
- Signal or Image Processing
- Vision or Pattern Recognition
- Condition Monitoring
- Fault Diagnosis
- Systems Integration
- Time Series Prediction
- Robotics
- Motion Control and Power Electronics
- Biomedical Engineering
- Virtual Reality
- Power and Energy
- Data Mining
- Data Visualisation
- Intelligent Information Retrieval
- Autonomous Reasoning

### The application fields

- Decision Support
- Process and System Control
- System Identification and Modelling
- Telecommunications
- Consumer Electronics

## International Program Committee

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- **Aboul ella Hassanien, Cairo Univesrity, Egypt**
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- **Paulo Novais Universidade do Minho (Portugal).**
- **Freeman, Richard" capgemini UK**
- **Juan M. Corchado University of Salamanca. Spain**

### 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 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