



## IWANN 2009

**10th International Work-Conference on Artificial Neural Networks (IWANN'2009)**  
**(Biological Inspired Systems. Computational and Ambient Intelligence)**  
**Hospedería del Colegio Fonseca, Salamanca, Spain; June 10-12, 2009**

### ORGANIZING COMMITTEE

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 Alberto Prieto  
 Francisco Sandoval

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#### Program Chairs:

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#### Publicity and Publication

#### Chairs:

Juan M. Corchado  
 Sara Rodríguez  
 Francisco de Paz  
 Javier Bajo  
 Emilio S. Corchado

#### Registration and Local Arrangements Chairs:

### SCOPE

This biennial meeting seeks to provide a discussion forum for scientists, engineers, educators and students about the latest ideas and realizations in the foundations, theory, models and applications of systems inspired on nature (neural networks, fuzzy logic and evolutionary systems) as well as in emerging areas related to the above items. As in previous editions of IWANN, it also aims to create a friendly environment that could lead to the establishment or strengthening of scientific collaborations and exchanges among attendees.

During the present edition, the following associated satellite Workshops will be organized:

- **3rd International Workshop on Practical Applications of Computational Biology & Bioinformatics (IWPACBB)**
- **3rd International Workshop on User-Centric Technologies and Applications (MADRINET)**
- **2nd International Symposium on Distributed Computing and Artificial Intelligence (DCAI)**
- **1st International Workshop on Soft Computing Models in Industrial Applications (SoCo)**
- **1st International Workshop of Ambient Assisted Living (IWAAL)**

The proceedings will include all the presented communications to the conference. As in previous editions of IWANN, we are arranging the publication of the proceedings with Springer-Verlag on Lecture Notes on Computer Science (LNCS) series, and the books will be available on-site. It is also foreseen the publication of an extended version of selected papers in a special issue of the Neurocomputing journal (Elsevier).

IWANN is included in the ranking of the best conferences established by the Computer Science Conference Ranking based on the "Estimated Impact of Conference (EIC)", concretely in position 55 among 620 considered (in the Artificial Intelligence field). Also the IWANN papers are indexed by CiteSeer.IST, and by the organization Computing Research and Education Association (CORE).

### PROGRAM COMMITTEE (tentative)

Igor Aleksander  
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 Plamen Angelov  
 Cecilio Angulo  
 Antonio Artés Rodríguez  
 Antonio Bahamonde  
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 Carme Torras  
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 Mark Van Rossum  
 Marley Vellasco  
 Alfredo Vellido  
 Michel Verleysen  
 Thomas Villman  
 Changjiu Zhou  
 Ahmed Zobaa  
 Pedro Zufiria

### TOPICS

The topics of interest include, but are not limited to:

1. **Mathematical and theoretical methods in computational intelligence.** Complex and social systems. Evolutionary and genetic algorithms. Fuzzy logic. Mathematics for neural networks. RBF structures. Self-organizing networks and methods. Support vector machines.
2. **Neurocomputational formulations.** Single-neuron modelling. Perceptual modelling. System-level neural modelling. Spiking neurons. Models of biological learning.
3. **Learning and adaptation.** Adaptive systems. Imitation learning. Reconfigurable systems. Supervised, non-supervised, reinforcement and statistical algorithms.
4. **Emulation of cognitive functions.** Decision Making. Multi-agent systems. Sensor mesh. Natural language. Pattern recognition. Perceptual and motor functions (visual, auditory, tactile, virtual reality, etc.). Robotics. Planning motor control.
5. **Bio-inspired systems and neuro-engineering.** Embedded intelligent systems. Evolvable computing. Evolving hardware. Microelectronics for neural, fuzzy and bioinspired systems. Neural prostheses. Retinomorph systems. Brain-computer interfaces (BCI) Nanosystems. Nanocognitive systems.
6. **Ambient intelligence.** Unobtrusive hardware. Seamless mobile/fixed communication and computing infrastructure. Dynamic and massively distributed device networks. Human-centric computer interfaces. Dependable and secure systems and devices. Ambient assisting living (AAL).
7. **Applications.** Adaptive interfaces. Ambient intelligence. Biomimetic applications. Data analysis and pre-processing. Data mining. Economy and financial engineering. Fuzzy systems for control. Internet. Neural networks for control. Power systems. Signal processing. Telecommunication applications. Time series and prediction.

### TIMELINE

November 25, 2008	Submission of Special Session proposals
December 1, 2008	Special Session acceptance.
January 23, 2009	Submission of papers by authors
February 27, 2009	Notification of provisional acceptance.
March 16, 2009	Submission of final papers.
March 16, 2009	Early registration (special rates).
June 10-12, 2009	IWANN Conference.

### HOME PAGE

<http://www.iwann-conference.es>  
<http://iwann.ugr.es/>

### Spanish Chapter of IEEE CIS

