



2010 IEEE WORLD CONGRESS ON COMPUTATIONAL INTELLIGENCE

JULY 18-23, 2010, BARCELONA, SPAIN

Barcelona International Convention Centre (CCIB)



CALL FOR PARTICIPATION

The 2010 IEEE World Congress on Computational Intelligence (IEEE WCCI 2010) is the largest technical event in the field of computational intelligence. It will host three conferences: the 2010 International Joint Conference on Neural Networks (IJCNN 2010), the 2010 IEEE International Conference on Fuzzy Systems (FUZZ-IEEE 2010), and the 2010 IEEE Congress on Evolutionary Computation (IEEE CEC 2010). IEEE WCCI 2010 will be held in Barcelona, a Mediterranean city located in a privileged position on the northeastern coast of Spain. Barcelona combines history, art, architecture, and charm within a pleasant, and efficient urban environment where meet old friends, and make new ones. The Congress will provide a stimulating forum for scientists, engineers, educators, and students from all over the world to discuss and present their research findings on computational intelligence.

The Program of the Congress includes many different activities as described below.

Plenary and invited lecturers

Five plenary lectures by world authorities have been arranged: Enrique H. Ruspini on "From Clusters to Models and Perceptions: The Evolution of Fuzzy Clustering", Pedro Larrañaga on "Probabilistic Graphical Models and Evolutionary Computation", Rudolf Kruse on "Temporal Aspects in Data Mining", Shiro Usui on "PLATO: Platform for Collaborative Brain System Modeling", and Sushmita Mitra on "Hybridization with Rough Sets".

Additionally, each conference will include three invited lecturers:

- Erkki Oja, Jose C. Principe, and Marley Maria Bernardes Rebuszi Vellasco for IJCNN;
- James C. Bezdek, Nozha Boujemaa, and Ronald R. Yager for FUZZ-IEEE;
- Hussein Abbass, Simon Lucas, and Dipti Srinivasan for IEEE CEC.

Special Sessions

IEEE WCCI 2010 Program will include one hundred sixteen special sessions proposed by domain specialists on focused topics. The complete list of accepted special sessions is available at <http://www.wcci2010.org/special-sessions>.

Tutorials and Workshops

IEEE WCCI 2010 will feature pre-congress tutorials covering fundamental and advanced computational intelligence topics. Twenty nine tutorials have been accepted for WCCI 2010, corresponding to five for FUZZ-IEEE, thirteen for IEEE CEC, and seven for IJCNN, and an additional four topics that cover all three conferences. A complete list will be available on the web. Seven workshops are also planned.

Competitions

IEEE WCCI 2010 is hosting competitions to stimulate research in computational intelligence, promote fair evaluations, and attract students. The following competitions have been accepted:

- Data mining (IJCNN): Embrology, Text mining, Handwriting recognition, Marketing, Ecology, and Chemo-infomatics
- Evolutionary computing (CEC): Grid Plants and IPD 4 Species
- Optimization (CEC): High-dimensional numeric optimization and Constrained Real-parameter optimization
- Games (CEC): PacMan, Simulated Car Racing, and Human vs. computer Go
- Time series prediction competitions (IJCNN): Yearly, Quarterly, Monthly, Weekly, Daily, and Hourly transportation data

For additional information visit <http://www.wcci2010.org/competition-program>

Social Events

A number of social events have been arranged, including: Welcome reception (18th July), Students reception (20th July), Conference banquet (21st July) and Closing ceremony (23rd July).

Website: <http://www.wcci2010.org>; E-mail: contact@wcci2010.org

IEEE WCCI Sponsor

IEEE Computational Intelligence Society (CIS)

IJCNN Joint Sponsor

International Neural Network Society (INNS)

IEEE CEC

Previously sponsored by the former Evolutionary Programming Society and the Institution of Engineering and Technology

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