



CIP 2012

Third International Workshop on Cognitive Information Processing

May 28 to 30, 2012
Parador de Baiona (Pontevedra, Spain)

<http://cip2012.tsc.uc3m.es>



Important Dates

Submission deadline:

January 15th, 2012
(Details at webpage)

Accept / reject decisions:

March 15th, 2012

Final papers due:

April 15th, 2012

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FINAL CALL FOR PAPERS

Following the success of the previous editions of the Workshop on Cognitive Information Processing (CIP), we are pleased to announce the third one in this series*.

This workshop aims at bringing together researchers from the machine learning, pattern recognition, statistical signal processing, social sciences, communications and radar communities in an effort to promote and encourage cross-fertilization of ideas and tools.

CIP 2012 will take place in Baiona (Spain), at Parador de Baiona Hotel, which rises as an impressive viewpoint over the ocean, surrounded by medieval fortress.



The workshop will feature keynote addresses and technical presentations, oral and poster, all of which will be included in the workshop proceedings.

Papers are solicited for the following areas in theory and applications:

Theory

- T1 Machine learning theory
- T2 Cognitive principles for machine and ensemble architectures and training
- T3 Adaptive and sparsity-aware learning
- T4 Deep learning and extreme machines
- T5 Cognitive psychological modeling
- T6 Machine understanding and human-machine interaction
- T7 Cognitive dynamical systems
- T8 Cognitive fuzzy methods and techniques
- T9 Cognitive decision making and game theory
- T10 Collaborative sensing
- T11 Large-scale machine learning

Applications

- A1 Cognitive signal processing
- A2 Distributed and cooperative processing
- A3 Cognitive communications: Modulation, networks, dynamic spectrum management and personalization
- A4 Cognitive radar and sonar: Detection, estimation, tracking and target identification
- A5 Information (data, text, audio, image, video) mining
- A6 Social networks
- A7 Applications in social sciences, medicine, neuroimage, bioinformatics, energy and smart grids, advanced manufacturing, robotics, artificial vision, engineering systems, industrial processes, economy and finance

The financial support of the following organizations is gratefully acknowledged



* All previous events were also sponsored by IEEE. CIP 2012 sponsorship application has been accepted.

Keynote Addresses

- Mario A.T. Figueiredo (IST Lisbon, Portugal)
“Algorithms for Signal Reconstruction and Learning under Sparsity and Structured Sparsity Regularization”
- Lars-Kai Hansen (DTU, Denmark)
“Attention as a Machine Learning Problem”
- Shigeru Katagiri (Doshisha University, Japan)
“Minimum Classification Error vs. Maximum Margin: How Should We Penalize Unseen Samples?”
- Susana Martínez-Conde and Stephen L. Macknik (Barrow Neurological Inst., USA)
“Slights of Mind: What the Neuroscience of Magic Reveals About Our Brains”
- Jose M. F. Moura (Carnegie-Mellon University, USA)
IAPR Invited Lecture
“Distributed vs. Centralized: The Role of the Network”
- Massimiliano Pontil (University College London, UK)
“Multi-task Learning: Theory and Practice”
- Lior Rokach (Ben Gurion University, Israel)
“Reverse Engineering of Integrated Circuits Using Machine Learning”

Special Sessions

- Cognitive Audio Modeling and Crowd Sourcing
Organizers: Jan Larsen (DTU, Denmark) <jl@imm.dtu.dk>
Jerónimo Arenas-García (UCIIM, Spain) <jarenas@tsc.uc3m.es>
- Cognitive Radio
Organizers: Fernando Pérez-González (Univ. Vigo, Spain & UNM, USA) <fperez@gts.uvigo.es>
Carlos Mosquera (Univ. Vigo, Spain) <mosquera@gts.uvigo.es>
- Collaborative and Distributed Signal Processing for Wireless Networks
Organizer: Carles Antón (CTTC, Spain) <carles.anton@cttc.es>

IEEE Spain Section Student Paper Prize

A prize of 500.00€ will recognize the best contribution whose first author be a Ph.D. student. The prize is funded by the IEEE Spain Section.

Registration Fees	Early before March 30th 2012	Late after March 30th 2012
Graduate Students	350€	450€
Speakers (one per contribution), reviewers, members of technical sponsor societies, employees of financial sponsors	550€	650€
Other	650€	750€

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