



FINAL CALL FOR PAPERS

LA-CCI 2014 * Latin American Congress on Computational Intelligence

Co-located at **ARGENCON 2014**

June 11-13, 2014

<http://la-cci.org/> . OR. <http://argencon.ieee.org.ar/la-cci/>

San Carlos de Bariloche (Argentina)

Organized by the LA-CCI Steering Committee: <http://la-cci.org/steering-committee/> and technically co-sponsored by the IEEE Computational Intelligence Society <http://cis.ieee.org>



AIMS AND SCOPE

The 1st Latin American Congress on Computational Intelligence 2014, co-located with ARGENCON 2014 aims to bring together the Soft Computing community to present the latest achievements and innovations in the multiple areas of Computational Intelligence, encourage participation by young researchers and following the LA-CCI Manifesto: *to provide a high-level international forum for scientists, researchers, engineers, professionals and educators to disseminate their latest research results and exchange views of the future research directions in the area of Computational Intelligence.*

TOPICS

Any topic related to Computational Intelligence, mainly but not limited to the following:

Problems	Approaches	Technologies
<p>For all tracks of Congress</p> <ul style="list-style-type: none"> - Foundations of Computational Intelligence; - Analysis & Identification; - Modeling & Design; - Representation & Interfacing; - Methods & techniques of CI Hybridization; - Simulation & Estimation; - Signal & Sensor Processing; - Machine learning and pattern recognition; - Time series forecasting; - Classification & Clustering; - Search & Optimization (combinatorial, stochastic, dynamic, multimodal, multi-objective, etc); - Constraint handling (Routing, Scheduling, Timetabling, allocation Neighboring, Placement, etc); - Information retrieval & Ambient intelligence; - Decision Problems; - Cognitive Robotics; - Image Processing & Computer Vision; - Bio & Medical Informatics – Computational biology; - Information & Network security; - Data & Web Mining; - E-commerce, E-Procurement & E-Government; - Telecommunications and Networking; - Energy generation and energy dispatch; - Parallelization & Hardware Implementations. 	<p>(1) Evolutionary & Swarm Computation:</p> <ul style="list-style-type: none"> - Evolutionary computing; - Swarm intelligence; - Artificial immune systems; - Novel metaheuristics and hyperheuristics; - Memetic and Collective intelligence; - Nature and Bio-inspired methods; - Artificial life. <p>(2) Neural & Learning Systems:</p> <ul style="list-style-type: none"> - Machine learning; - Neural Computation (+Weightless Systems); - Complex systems; - Wavelets; - Molecular and quantum computing; - Brain-machine interfaces; - Science of Networks; - Local search methods. <p>(3) Fuzzy & Stochastic Modeling:</p> <ul style="list-style-type: none"> - Fuzzy logic; - Fuzzy optimization and design; - Fuzzy pattern recognition; - Uncertainty analysis; - Fractals; - Game theory; - Social Simulation; - Fuzzy control & decision making/support; - Multi-agent systems; - Rough sets; - Computational verb theory; - Grey systems. <p>(4) Autonomous Mental Development</p>	<p>(1) Evolutionary & Swarm Computation:</p> <ul style="list-style-type: none"> - Ant colony optimization, Particle swarm optimization; - Fish School Search; Bee colony optimization; - Genetic programming and Genetic algorithms; - Cultural Algorithms and Co-Evolution; - Evolutionary Strategy and Differential Evolution; - Evolutionary design & scheduling; - Danger theory and network immune systems; - Firefly optimization; - Glowworm Swarm Optimization; - Cuckoo search; - Herd optimization. <p>(2) Neural & Learning Systems:</p> <ul style="list-style-type: none"> - Cognitive systems and applications; - Computer vision; - Hardware Implementations; - Web intelligence; - Natural language processing & Speech understanding; - Supervised and Unsupervised Learning; - Semi-supervised and Weakly Supervised Learning; - Support vector machines; - Tabu search, iterated search, etc. <p>(3) Fuzzy & Stochastic Modeling:</p> <ul style="list-style-type: none"> - Fuzzy sets & Type-2 fuzzy logic; - Approximate reasoning; - Rough sets & data analysis; - Case Based Reasoning; - Expert systems; - Knowledge engineering. <p>(4) Adaptive Dynamic Prog. and Reinforcement Learning</p> <ul style="list-style-type: none"> - Convergence and performance analysis - RL and ADP-based control - Complexity issues in RL and ADP - Monte-Carlo tree search and other MC methods - Statistical learning and PAC bounds for RL - Bayesian RL and exploration - Partially observable Markov decision processes - Neuroscience and biologically inspired control - ADP / RL for multiplayer games and multiagent systems - Distributed intelligent systems - Multi-level multi-objective optimization for ADPRL - Applications of ADP and RL

Presentation of the papers:

The Scientific committee will select the best 12 papers for oral presentation in LA-CCI track. The official language is English. Other relevant works will be selected as poster presentation.

Papers may be submitted only in PDF format using the EasyChair system by accessing the following address

<https://www.easychair.org/conferences/?conf=argencon2014>

and selecting "The Latin American Congress on Computational Intelligence" track.

Papers must be in English following the IEEE two-column format. The maximum length of papers is six (6) pages.

(more detailed instructions are at <http://argencon.ieee.org.ar/llamado/trabajos/>)

LaTeX and MSWord templates can be downloaded from:

http://argencon.ieee.org.ar/documents/argencon_latex_template_a4.zip

http://argencon.ieee.org.ar/documents/argencon_word_template_a4.doc

Post-proceedings

Author of presented papers will be invited to include their papers in Post-Conference Proceedings to be published by IEEE Press.

Special Issue

Best paper accepted and presented on LA-CCI can be included on:

- An **Special Issue** of the "Revista da Sociedade Brasileira de Inteligência Computacional: Learning & Non-Linear Systems" http://sbic.ct.ufrn.br/?page_id=18
- **Transactions on Computational Science and Computational Intelligence** (Springer Series) <http://www.springer.com/series/11769>

Important Dates:

- Submission of draft papers (23:59, GMT -3) ~~10 April 2014~~ **20 April 2014**
- Notification of Acceptance ~~05 May 2014~~ **10 May 2014**
- Submission of camera-ready papers, ~~20 May 2014~~ **25 May 2014**
- Conference desk opens **12 June 2014**

Scientific Committee

Chairs:

- Yván Jesús Túpac Valdivia (Universidad Católica San Pablo. Peru)
- Efrén Gorrostieta Hurtado (Universidad Autónoma de Querétaro. Mexico)

Members: (Check website for Scientific Committee members of LA-CCI at <http://la-cci.org/scientific-committee/>)

LA-CCI Steering Committee

ARGENTINA (LA-CCI 2014 Organizing Country):

- Cristian Rodríguez Rivero - Universidad Nacional de Córdoba (***) Local Organizer of LA-CCI2014)
- María Daniela López De Luise - Universidad Autónoma de Entre Ríos (Country Panels Coordinator)
- Javier Areta - Universidad Nacional de Río Negro (Argencon 2014 Organizer)
- Gustavo Juárez - Universidad Nacional de Tucumán (Poster Presentations Coordinator)

BOLIVIA:

- Jorge Antonio Nava Amador - Universidad Mayor de San Andrés
- Grover Zurita Villarroel - Universidad Privada Boliviana

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- Fernando Buarque de Lima Neto - Universidade de Pernambuco (***) Steering Committee Coordinator)
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- Ernesto Cuadros Vargas - Universidad Católica San Pablo
- Yván Jesús Túpac Valdivia - Universidad Católica San Pablo (***) Scientific Committee Chair)

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