Call for Papers

International Journal of Bio-Inspired Computation
http://www.inderscience.com/browse/index.php?journalCODE=ijbic

Special Issue on "New challenges in Bio-inspired algorithms in complex and distributed problems"

Guest Editors

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A. The topic

Bio-inspired algorithms and methods, from computational intelligence techniques as swarm or evolutionary algorithms to other techniques based on principles or models of biological systems, are currently a hot topic in wide number of research areas. The problems related to the representation, and practical application, of these kinds of algorithms provides new and interesting solutions in traditionally complex domains. Distributed Computing develops methods and technology to build systems that are composed of collaborating components. The domains and problems traditionally handled by Distributed Computing allow to look for new challenges to Bio-inspired computation approaches.

This special issue welcomes submissions of original papers introducing research results on all the aspects covering the roles of Knowledge and Intelligence in Distributed Systems, ranging from concepts and theoretical developments to advanced technologies and innovative applications. The key topic will be based on practical and real world utilization of Bio-inspired methods, techniques and algorithms in previous types of systems and domains.

Paper acceptance and publication will be judged on the basis of their quality and relevance to the symposium themes, clarity of presentation, originality and accuracy of results and proposed solutions.

Topics include, but are not limited to:

- Hybrid systems involving software agents and human actors
- Bio-inspired integration of data, information and processes
- Autonomic, adaptive and self-organized distributed computing
- Intelligent service-oriented distributed systems
- Self-organising and adaptive distributed systems
- Emerging behaviours in complex distributed systems
- Knowledge integration and fusion from distributed sources
- Data mining and knowledge discovery in distributed settings based on Bio-inspired methods
- Intelligent distributed problem solving and decision making
- Bio-inspired computation in complex and real applications (videogames, e-business/e-commerce, e-learning, e-health, e-science, e-government, crisis management, etc…)
- Swarm Intelligence and Evolutionary Computation in Distributed and Intelligent applications

- Bio-inspired computation to Unmanned Systems
- Bio-inspired computation to Social-based knowledge
- Forecasting through complex system models and bio-inspire models.

B. Submission and review

All submissions will be reviewed according to the journal peer-review policy. Please submit your contribution to http://www.inderscience.com/mapper.php?id=35&jid=329 inserting the acronym for your special issue – BACDP2015.

For preparing your manuscripts please use the instructions and templates available at: http://www.inderscience.com/browse/index.php?journalID=329#submission.
Submitted papers will be subject to maximum 2 rounds of refereeing process and the authors will be informed about the final decision by March 15th, 2015.

The planned calendar is:
- Submission: 15 November 2014
- First notification: 15 January 2015
- Submission of revisions: 15 February 2015
- Final decision: 15 March 2015
- Submission of camera ready papers: 15 June 2015
- Journal issue: September-October 2015

C. Potential contributors

Submitted papers must be unpublished or not submitted anywhere else for publication. If a shorter version of the paper has been accepted or published in a conference, then the submission must contain at least **60%** as compared to the conference publication, this must be mentioned when submitting the paper, as well as the name of the conference and the title of publication. The BACPD 2015 special issue will be based on submissions attracted by:

    A) Open call, which commits with previous conditions
    B) Invitation of selected papers that were accepted and presented at the IDC'2014 symposium and their joint workshops (http://aida.ii.uam.es/IDC2014/). These submissions must differ at least **50%** from the initial versions published in the IDC-2014 proceedings. More specifically, we expect:
        - The update of the title and the abstract
        - The extension and elaboration of the key ideas
        - The extension of the related work section and list of references
        - More extensive and/or larger examples/experiments, if applicable
        - Improved descriptions of algorithms or applications, if applicable
        - The inclusion or extension of an evaluation of the approach
        - Improved discussion and/or conclusion sections