

CALL FOR PAPERS

Special Session/Workshop on

NATURE INSPIRED METHODS in KNOWLEDGE BASED SYSTEMS

organized as a part of 13th International Conference on Knowledge-Based and Intelligent Information & Engineering Systems KES2009 28, 29 and 30 September 2009 Santiago, Chile

<http://kes2009.kesinternational.org>

The goal of this session is to point out the challenges and problems of Nature Inspired approaches to support Knowledge Based Systems, but also to show the new ideas, solutions and practices. Currently used Knowledge Based Systems are characterized by an ever growing complexity. In order to build more sophisticated next-generation knowledge-based systems it is necessary to integrate formal, neural, statistical and/or symbolic representations. The challenge is knowledge acquisition and knowledge integration. In this case nature inspired methods like evolutionary algorithms ant colonies, immunology systems and bees method are proving effective because they offer fault-tolerant and self-adaptive behaviors.

The session aims to bring together researchers and practitioners to share experience and research results, both of works in progress and practical experience, on any topic relevant but not limited to

- Extraction of symbolic knowledge by nature inspired methods
- Nature inspired methods in integration of knowledge coming from various sources
- New nature inspired methods specialized in support knowledge based systems
- The representation of symbolic knowledge by neural-symbolic systems
- Knowledge discovery and data mining with the use of nature inspired methods
- Nature inspired methods in knowledge visualization
- Extraction of symbolic knowledge from trained neural networks;
- Reasoning in neural-symbolic systems;
- Empirical and/or theoretical comparisons between classic and nature-inspired methods applied to support knowledge based systems.

Paper Submission and Publication

Information concerning paper submission and publication can be found on the page:

<http://kes2009.kesinternational.org/submission.php>

Extended versions of selected papers will be published as Special Issues of a selected journal (it will be announced later)

Papers will be refereed and accepted on the basis of their scientific merit and relevance to the special session

Important dates:

The deadlines are the same as for General Sessions:

<http://kes2009.kesinternational.org/deadlines.php>

- Submission of papers: **29 March 2009**
- Notification of acceptance: **25 April 2009**
- Final paper publication files to be received by: **23 May 2009**

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