World Congress on Nature and Biologically Inspired Computing (NABIC'09)
December 9-11, 2009, Coimbatore, India

Call for Papers

SPECIAL SESSION Multi-Objective Swarm Intelligence: Recent Developments and Perspectives

In recent years, the attraction of Swarm Intelligence methods has remarkably increased. The reasons for this are various, and among them one can find their efficient search and optimization capabilities, ease of implementation, increasing researchers experience, variability and flexibility of the approaches, hybridization with other algorithms etc. In parallel, also the establishment of using more than one objective in optimization has found new ground, esp. based on the rapid distribution of a class of new algorithms called multi-objective evolutionary algorithms. While not being primarily evolutionary computation by itself, there is much exchange between the disciplines of Swarm Intelligence and Evolutionary Computation. This session is focussing on the design of Swarm Intelligence and its applications for multi-objective optimization problems. It is supposed to provide a forum for exchanging newest research ideas in this field and to promote its further articulation and development. Among the topics of interest are:

- Multi-objective Particle Swarm Optimization
- Multi-objective Ant Colony Optimization
- Multi-objective Differential Evolution
- Multi-objective Bee Colony Optimization
- General issues of multi-objectivity in Swarm Intelligence
- Comparison of Swarm Intelligence and Evolutionary Computation
- Comparison of single- and multi-objective Swarm Intelligence
- Parameterization of Swarm Intelligence methods
- Hybrid Swarm Intelligence
- Frameworks for Swarm Intelligence design and applications
- Swarm Intelligence and many-objective optimization
- Swarm Intelligence and multi-modality
- Parallelization of Swarm Intelligence algorithms
- Application design patterns for Swarm Intelligence

Important Dates

Full Paper Due Date: June 26, 2009 Notification: August 14, 2009

Camera-ready Paper Deadline: September 14, 2009

Paper Submission

Papers are invited from prospective authors with interests in this particular special session and related areas of application. All contributions should be original and not published elsewhere or intended to be published during the review period. Contributions from more applied related fields in industry and commerce are very welcome. All papers are to be submitted electronically in PDF format to the special session organizers. Details of the required paper format are published at the official NABIC 2009 website

http://www.mirlabs.org/nabic09

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