

Information Systems

Special Issue on “Natural Inspired Computation”

CALL FOR PAPERS

Deadline for submission: August 20, 2009

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Natural Inspired Computation focuses on studying and understanding the underlying principles of natural computation, and how these principles can be adopted or modified to extend and enrich computer science and engineering. Algorithms, techniques and methods based on these principles have been successfully applied to a wide range of complex problems. From the perspective of science development, Natural Inspired Computation is an emerging interdisciplinary area between Natural Sciences (especially Life Sciences) and Computer Science. Its rapid growth is a natural product of the rapid development of interdisciplinary research today.

Natural Inspired Computation, including evolutionary computation, neural computation, ecological computation, quantum computation, complex self-adaptive system and other fields inspired by natural systems, has unique characteristics of self-adaptive, self-organizing and self-learning. Because of its ability to solve complex problems that are difficult for traditional computational methods, Natural Inspired Computation is widely used in many fields, such as machine learning, optimal design, optimal control, network security and creative design.

A special issue on “Natural Inspired Computation” will be published in “**Information Systems**”. This Special Issue aims at exhibiting the latest research achievement, findings and ideas in the areas of “Natural Inspired Computation”. Papers that prove new theoretical results on “Natural Inspired Computation” and their successful applications to real-world problems are particularly welcome.

Topics include but are not limited to:

- Ant Colony Optimization
- Particle Swarm Optimization
- Artificial Immune Systems
- Artificial Neural Networks
- Memetic Algorithms
- Cultural computation
- Differential evolution

- Artificial life
- Granular computing
- Reinforcement Learning
- Genetic Algorithms
- Quantum Computation
- DNA computing
- Internet computing
- Collective Intelligence
- Evolvable Hardware and Software
- Hybrid Evolutionary Optimization Algorithms
- Computational Complexity of Evolutionary Algorithms
- Convergence and Convergence-Rate of Evolutionary Algorithms

Important Dates:

Submission of Manuscripts: **August 20, 2009**

Notification of Acceptance: **October 30, 2009**

Submission of Final Papers: **December 20, 2009**

All submission should include a title page containing the title of the paper, full names and affiliation, complete postal and electronic address, phone and fax numbers, an abstract and a list of keywords, followed by the main text, references, list of figures and tables, figures, and tables.

The corresponding author should be clearly identified.

All manuscripts will undergo a normal review process. Only manuscripts with minor modification will be accepted for publication in the Special Section. Those manuscripts that need a major revision will be forwarded to the journal office for examining possible publication in regular issues.

Original artwork and a signed copy of the copyright release form will be required for all accepted papers. Inquiries can be made to the guest editor at hbduan@buaa.edu.cn

All electronic submission should be uploaded to the “**Information Systems**” on-line submission system. Manuscript submissions can also be emailed to:

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