Swarm Intelligence (SI) is a computational intelligence technique involving the study of collective behavior in decentralized systems. Such systems are made up by a population of simple individuals interacting locally with one another and with their environment. Although there is typically no centralized control dictating the behavior of the individuals, local interactions among individuals often cause a global pattern to emerge. Examples of systems like this can be found in nature, including ant colonies, animal herding, bacteria foraging, bird flocking, fish schooling, honey bees, and many more.

Submissions of original and unpublished work related to swarm intelligence are invited, including research, theory, development, and applications. Areas of focus include particle swarm optimization, ant colony swarms, cultural algorithms, foraging techniques, and other swarm-related topics.

Authors are invited to submit their original and unpublished work in the areas including, but not limited to, the following:

- Modeling and analysis of particle swarm optimization, Ant colony optimization, culture algorithm, foraging algorithm.
- Optimization techniques in dynamic, multi-objective, constrained environment.
- Modeling and analysis of biological collective systems such as social insects colonies, school and flocking vertebrates.
- Distributed computing, machine learning, data mining, data clustering, graph partitioning, and decision making based on swarm intelligence principles.
- Theory and applications of swarm intelligence principles to real world problems including control systems, evolvable hardware, power systems, power electronics, sensor networks, bioinformatics, business and finance, supply-chain management, planning and operations in industrial systems, transportation systems, and others areas.

Authors should submit their papers in MS Word or PDF format to sis08@computelligence.org. The paper format can be found on http://www.computelligence.org/sis/2008/, Electronic submission is preferred.

Important Dates

- Special Session and Tutorial Proposals: Apr. 15, 2008
- Paper Submission: June 15, 2008
- Author Notification: July 1, 2008
- Camera-Ready Papers: July 15, 2008
- Early Registration Ends: July 15, 2008

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