# **CALL FOR PAPERS**

**Special Session on Swarm Intelligence and Data Mining (SIDM 2013)** 

http://sidm2013.nclab.tw

The 14th International Conference on Intelligent Data Engineering and Automated Learning (IDEAL 2013) 20—23 October 2013, Hefei, Anhui, China

http://nical.ustc.edu.cn/ideal13/

### Overview

Swarm intelligence is a recent trend in computational intelligence and popular for the simplicity of its realizations, such as particle swarm optimization (PSO), ant colony optimization (ACO), bee colony optimization (BCO), and the like. As optimization techniques, methods in swarm intelligence have been applied to many aspects in the fields of data engineering and automated learning. For example, as reported in the literature, PSO has been adopted to handle data clustering, and ACO has been employed to solve the problem of classification. On the other hand, advances in data mining, an important section in data engineering and automated learning, also assist optimization algorithm designers to develop better methods. For instance, Apriori algorithm has been utilized for finding the relationship among decision variables for optimizers. In order to bridge the concepts and methodologies from the two ends, this special session concentrates on the related topics of integrating and utilizing algorithms in swarm intelligence and data mining. It provides the opportunity for practitioners handling their data mining issues by using swarm intelligence methodologies and for researchers investigating swarm intelligence with data mining approaches to share findings and look into future directions.

# Scope

This special session aims at providing a forum for adopting the state-of-the-art swarm intelligence techniques in data mining, developing the advanced swarm intelligence techniques by using data mining methods, as well as exchanging of related ideas and discussing the future directions. We invite researchers to submit their original and unpublished work related to, but not limited to, the following topics:

- Data mining with swarm intelligence techniques
- Swarm intelligence techniques based on data mining concepts and/or methods
- Multi-objective swarm intelligence and data mining
- Parallelization in swarm intelligence and data mining
- Performance measure and benchmarks
- Theoretical aspects of data mining and swarm intelligence
- Position papers
- Real-world applications

### **Submission Guidelines**

Please follow the IDEAL 2013 instructions for authors and submit your paper via the IDEAL 2013 online submission system with specifying that your paper is for the Special Session on Swarm Intelligence and Data Mining. Accepted papers presented at the conference will be included in the Proceedings of IDEAL 2013, to be published by Springer in its LNCS series, which is indexed by EI and DBLP.

# **Important Dates**

Paper Submission Deadline: 24 May 2013 extended to 17 June 2013

Notification of Acceptance: 5 July 2013 Camera-Ready Copy Due: 26 July 2013 Conference Presentation: 20-23 October 2013

# **Session Organizers**

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