

Swarm Intelligence

Preface

This volume of *Fundamenta Informaticae* (FI) contains papers for a special issue on swarm intelligence as well as regular papers contributed to FI.

Swarm Intelligence is an innovative distributed intelligent paradigm for solving optimization problems, which is originally inspired from the biological examples by swarming, flocking and herding phenomena in vertebrates. In the literature, it is possible to locate different variants of Swarm Intelligence paradigms. The most popular paradigms are Particle Swarm Optimization (PSO), which incorporates swarming behaviors observed in flocks of birds, schools of fish, or swarms of bees and the Ant Colony Optimization (ACO) algorithm inspired by the foraging behaviour of real ants.

This volume contains articles introducing advances in the foundations and applications of swarm intelligence. These advances have significant implications in a number of research areas such as constrained optimization problems, fast corner detection in gray-level images, harmony search algorithm, measuring resemblances between swarm behaviours, multiple-objective flexible job-shop scheduling, object tracking, and particle swarm optimization.

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Editors

Ajith Abraham, Machine Intelligence Research Labs, Europe

Zhihua Cui, Taiyuan University of Science and Technology

James F. Peters, University of Manitoba

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