Special Issue

Unconventional Methods for Particle Swarm Optimization II

Message from the Guest Editor

Particle swarm optimization (PSO) is a population-based optimization metaheuristic inspired by the collective dynamics of groups of animals, like insects, birds, and fishes. Recent research trends have indicated the potentiality of the approach and its possibilities for improvement. With the term "unconventional methods for PSO", we mean modifications of the standard PSO algorithm with the objective of improving its performance or bestowing on it some particular properties. Examples include new methods for choosing the inertia weight, constriction factor, or cognition and social weights; parallelizing PSO in several different ways: defining hybrid algorithms in which PSO is integrated with other types of metaheuristic optimization methods; and entropy-based PSO. The study of unconventional methods for PSO is a very lively and active research field, and the objective of this Special Issue is to present a collection of studies in this recent and exciting area, with a particular focus on entropic, information-theoretic, or probability-theoretic techniques.

Guest Editor

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Editor-in-Chief

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