

Special Issue

The Development and Application of Swarm Intelligence

Message from the Guest Editor

Swarm intelligence (SI) is inspired by collective behavior observed in nature. Similarly to the collective behavior of many simple beings, which use experience and information sharing to guide members of the swarm in achieving a complex objective, this Special Issue has a similar goal. The concept of SI dominates the field of metaheuristics. Among state-of-the-art SI algorithms are particle swarm optimization (PSO), ant colony optimization (ACO), artificial bee colony (ABC), and many others. These algorithms work like black boxes, where the same algorithm can be applied for various optimization problems. Indeed, the algorithms have been successfully applied in many problems across various fields, such as communication problems, logistic, engineering design, material research, bioinformatics, software, financial, and operational research. Despite the success of SI, however, there is room for improvement in this field. This Special Issue invites original research and review articles that look into new applications of SI and the development of new or improved SI algorithms.

Guest Editor

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About the Journal

Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal Applied Sciences has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

Editor-in-Chief

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