Abstract

In order to improve the performance of PSO algorithm, number of its variants has been made. This paper presents detail overview of the basic concepts of PSO and its variants. Many variants of PSO have been developed due to improved speed of convergence and quality of solution found by Researchers. The Applications of PSO in Complex Environments is discussed. Modifications, both those already developed, and promising future application areas are reviewed. Observation and review of 117 related studies in the period between 1995 and 2015 on different variants of PSO algorithms are discussed along with their advantages and disadvantages.

References

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**Index Terms**

Computer Science  
Algorithms
Keywords

Particle Swarm Optimization (PSO), Basic PSO, Modification PSO, Bird Flocking Evolutionary Optimization, Biologically Inspired Computational Search.