Using Multi-objective Artificial Fish Swarm Algorithm to Solve the Software Project Scheduling Problem

International Journal of Computer Applications
Foundation of Computer Science (FCS), NY, USA

Volume 181
Number 16
Year of Publication: 2018

Authors:
Sarah E. Almshhadany, Laheeb M. Ibrahim

10.5120/ijca2018917753

Abstract

In this paper, a new multi-objective artificial fish swarm algorithm was proposed based on the principles of PAES algorithm and it is used to solve SPSP. The aim of this proposal is to solve the software project scheduling problem with artificial fish swarm algorithm and to overcome some disadvantages that AFSA suffer from. The performance of the proposed algorithm was compared with another multi-objective AFSA based on the use of global information (GAFSA), in terms of speed, quality of produced solutions and complexity of algorithm operations. The results show that the proposed algorithm is faster, easier to implement, require less computations, and had obtained better nondominated solutions than the other algorithm.

References

2. Broderick C., Ricardo S., Franklin J., Eric M., Fernando P. 2014. A max-min ant system


Index Terms

Computer Science  Algorithms

Keywords

Software project scheduling problem, multi-objective optimization, artificial fish swarm algorithm.