Abstract

In the field of computer science and operation's research, PSO is an optimization algorithm which is inspired by social behaviour of bird flocking and fish schooling. The original PSO was used to solve continuous optimization problems. Crossover and mutation of the particle are modified due to the discrete solution's spaces of scheduling optimization problems. Artificial Bee Colony (ABC) is an optimization algorithm relatively new swarm intelligence technique based on behaviour of honey bee swarm and Meta heuristic. It is successfully applied to various paths mostly continuous optimization problems. Swarm intelligence systems are typically made up of a population of simple agents or boids interacting locally with one another and with their environment. The job scheduling problem is the problem of assigning the jobs in the system in a manner that will optimize the overall performance of the application, while assuring the correctness of the result. PSO and ABC algorithm is proposed in this paper, for solving the job scheduling problem with the criterion to decrease the maximum completion time. In this paper, modifications to the PSO and ABC algorithm is based on Genetic Algorithm (GA) of crossover and mutation operators. Such modifications applied to the creation of new candidate solutions improved performance of the algorithm.
References

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**Index Terms**

Computer Science

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**Keywords**

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