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Optimization of Total Holding Cost in Job Shop Scheduling by Using Hybrid Algorithm

1261



Abstract:

The classical job-shop scheduling problem is one of the most difficult combinatorial optimization problems. Scheduling is defined as the art of assigning resources to tasks in order to insure the termination of these tasks in a reasonable amount of time. Job shop scheduling problems vary widely according to specific production tasks but most are NP-hard problems. Mathematical and heuristic methods are the two major methods for resolving JSP. Job shop Scheduling problems are usually solved using heuristics to get optimal or near optimal solutions. In this paper, a Hybrid algorithm combined artificial immune system and sheep flock heredity

model algorithm is used for minimizing the total holding cost for different size benchmark problems. The results show that the proposed hybrid algorithm is an effective algorithm that gives better results than other hybrid algorithms compared in literature. The proposed hybrid algorithm is a good technique for scheduling problems.

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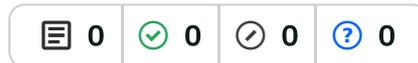
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