عنوان مقاله:

A Honey Bee Algorithm to Solve Quadratic Assignment Problem

محل انتشار:

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خلاصه مقاله:

Assigning facilities to locations is one of the important problems, which significantly is influence in transportation cost reduction. In this study, we solve quadratic assignment problem (QAP), using a meta-heuristic algorithm with deterministic tasks and equality in facilities and location number. It should be noted that any facility must be assign to only one location. In this paper, first of all, we have been described exact methods and heuristics, which are able to solve QAP; then we have been applied a meta-heuristic algorithm for it. QAP is a difficult problem and is in NP-hard class, so we have been used honey bee mating optimization (HBMO) algorithm to solve it.This method is new and have been applied and improved NP-hard problems. It's a hybrid algorithm from Honey-Bee Mating system, simulated annealing and genetic algorithm

کلمات کلیدی:

Honey-Bee mating optimization; Quadratic assignment problem; Heuristic methods; Meta- heuristic methods; Simulated annealing; Genetic algorithm

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