عنوان مقاله:

An Efficient Hybrid CS and K-Means Algorithm for the Capacitated P-Median Problem

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خلاصه مقاله:

Capacitated p-median problem (CPMP) is an important variation of facility location problem in which pcapacitated medians are economically selected to serve a set of demand vertices so that the total assigned demandto each of the candidate medians must not exceed its capacity. This paper surveys and analyses the combination ofCuckoo Search and K-Means algorithms to solve the CPMP. In order to check for quality and validity of thesuggestive method, we compared the final solution produced over the two test problems of Osman and Christofides,each of which including 10 sample tests. According to the results, the suggested meta-heuristic algorithm showssuperiority over the rest known algorithms in this field as all the best known solutions in the first problem set, andseveral sample sets in the .second problem set have been improved within reasonable periods of time

کلمات کلیدی:

Capacitated P-Median Problem, Cuckoo Search Algorithm, K-Means Clustering

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