عنوان مقاله:

NMFA: Novel Modified FA algorithm Based On Firefly Recent Behaviors

محل انتشار:

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خلاصه مقاله:

The Firefly optimization algorithm (FA) is one of the practical nature-inspired metaheuristic approaches in ۲۰۰۸, which simulated the behavior of fireflies in the movement toward the light sources. Recent studies on this beautiful creature have revealed new behaviors that strongly require us to review them. The proposed algorithm NMFA is the simulation results with the latest information from the behavior of fireflies. The NMFA is used for data clustering and optimization of continuous problems. The experimental results of the testing on optimization of ۲۶ standard functions show that the proposed method works best in terms of success rate and convergence than the FA, HS, ABC, and IWO algorithms and makes an important and substantial difference in optimization. The non-parametric, statistical, and pairwise tests show the superiority of the modern firefly algorithm. The NMFA can cluster the datasets like the conventional K-means .algorithm and obtain a significant result among the well-known methods

کلمات کلیدی:

Optimization, Firefly Algorithm, Clustering, Metaheuristic