

Improved mayfly algorithm based on hybrid mutation

Hua Zhang¹, zheng liu¹, ShiWeng Gui¹, Mei Zou¹, and PeiYuan Wang¹

¹Hubei University of Arts and Science

May 23, 2022

Abstract

To improve the diversity and performance of the Mayfly Algorithm (MA), this letter adopts the mutation strategies in the process of MA. The opposition-based learning (OBL) and Cauchy mutation strategies are used to mutate the global optimal solution, and the artificial mutation operator is used in the offspring population. The hybrid mutation strategies are used in a cascaded structure. The performance of the proposed algorithms is demonstrated in simulations comparatively.

Hosted file

Improved_mayfly_algorithm_based_on_the_hybrid_mutation_523-submitting.docx available at <https://authorea.com/users/484276/articles/570171-improved-mayfly-algorithm-based-on-hybrid-mutation>