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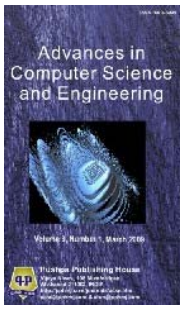

A NOVEL HYBRID ARTIFICIAL BEE COLONY ALGORITHM AND DIFFERENTIAL EVOLUTION FOR UNCONSTRAINED OPTIMIZATION PROBLEMS

A. Alizadegan, M. R. Meybodi and B. Asady

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Abstract

ABC (Artificial Bee Colony) algorithm is one of the most popular approaches that is used in optimization problems. ABC overcomes other well-known heuristic methods, such as GA, PSO and DE (Differential Evolution). In this paper, we propose a hybrid ABC-DE algorithm that combines properties of ABC and DE approaches. The results show that our proposed algorithm is better than both ABC and DE and other methods.

Keywords and phrases: artificial bee colony, differential evolution, numerical function optimization.