Oppositional Learning Prediction Operator with Jumping Rate for Simulated Kalman Filter

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Abstract:
Simulated Kalman filter (SKF) is among the new generation of metaheuristic optimization algorithm established in 2015. In this study, we introduce a prediction operator in SKF to prolong its exploration and to avoid premature convergence. The proposed prediction operator is based on oppositional learning with jumping rate. The results show that using CEC2014 as benchmark problems, the SKF algorithm with oppositional learning prediction operator with jumping rate outperforms the original SKF algorithm in most casespractical implications to expatriating firms. Finally, the research findings have implications for both Malaysian and International Human Resource Management (IHRM) researchers and managers.

Keywords: optimization, simulated Kalman filter.

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