

Alpinist CellularDE: a cellular based optimization algorithm for dynamic environmentsFull Text:  [PDF](#)  [Buy this Article](#)

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In this paper, we propose Alpinist CellularDE to address dynamic optimization problems. Alpinist CellularDE tries to detect different regions of the landscape and uses this information to perform more effective search and increase its performance. Moreover, in Alpinist CellularDE a directed local search is proposed to track local optima after detecting a change in the environment. The proposed algorithm is evaluated on various dynamic environments, modeled by Moving Peaks Benchmark. Experiments show superior performance of Alpinist CellularDE in all test cases in comparison with some of the best performing evolutionary algorithms for dynamic optimization problems.

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