

An Analysis on the Number of Agents Towards the Performance of the Simulated Kalman Filter Optimizer

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Abstract—This paper presents an analysis of simulated Kalman filter (SKF) optimization algorithm. The SKF algorithm is a population-based optimization algorithm and thus, requires the use of agents to perform a search process. In optimization, usually, different number of agent produces different performance in solving optimization problems. In this paper, the performance of SKF is investigated using different number of agent, from 10 up to 1000 agents. Using the same number of fitness evaluations, experimental results indicate that a surprisingly large population size offers higher performance in solving most optimization problems.

Keywords- *Kalman; optimization; agent;*