Assessing the Symbiotic Organism Search Variants using Standard Benchmark Functions

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Abstract:
Symbiotic Organism Search (SOS) is one of the latest meta-heuristic algorithms created to solve optimization problems. Combining the fact that this new algorithm is parameter-less (no need for tuning) and having a superior performance compared with other meta-heuristic algorithms, the interest to investigate and enhanced this algorithm had emerged. In this paper, we present a new version of SOS by looping the current algorithm rather than doing it one after the other. The target of this paper is to fmd the effect of changing the structure of algorithm from original SOS by testing it with a few benchmark functions. We found that by using a loop structure, it can find a better solution in some of the benchmarks functions as compared from the original SOS.

Keywords: Symbiotic Organism Search (SOS parameter-less; Symbiotic Organism

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