A self-adaptive step-size search algorithm for the cardinality constrained portfolio optimisation problem

ABSTRACT

This paper proposes a Self-adaptive Step-size Search (SASS) algorithm to address a Cardinality Constrained Portfolio Optimisation Problem (CCPOP). The proposed methodology is tested using five datasets from OR-Library. Experiments are conducted to test different settings of the particles in the SASS algorithm. The computational results are compared in terms of performance measures. The SASS algorithm achieves a lower value for most of the performance measures when the number of particles increases.