Abstract

The swarm intelligence plays vital role in feature reduction process in cyber-attack detection. The family of swarm intelligence gives bucket of algorithm for the processing of feature reduction such as ant colony optimization, particle swarm optimization and many more. In family of swarm new algorithm is called glowworm optimization algorithm based on the concept of luciferin. The luciferin collects the similar agent of glow and proceeds the minimum distance for the processing of lights. Such concept used for the reduction of feature in cyber-attack classification. The reduce attribute classified by well know classifier is called support vector machine. The combination of support vector machine and glowworm swarm optimization performs very well in compression of pervious feature reduction technique. The proposed algorithm is implemented in MATLAB software, for the validation of algorithm used KDDCUP99 dataset.
Improved the Detection Ratio of Cyber Attack using Feature Reduction based on Support Vector Machine


Index Terms
Keywords

Cyber Attack, Feature Reduction, GSO, SVM