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A Research and Application of Feature Selection Based on IWO and Tabu Search

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Abstract : Feature selection is one of the important problems in network security, pattern recognition, data mining and other fields. In order to remove redundant features, effectively improve the detection speed of intrusion detection system, proposes a new feature selection method, which is based on the invasive weed optimization (IWO) algorithm and tabu search algorithm(TS). Use IWO as a global search, tabu search algorithm for local search, to improve the results of IWO algorithm. The experimental results show that the feature selection method can effectively remove the redundant features of network data information in feature selection, reduction time, and to guarantee accurate detection rate, effectively improve the speed of detection system.

Keywords: intrusion detection, feature selection, iwo, tabu search

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