

ABSTRACT

INTRUSION DETECTION SYSTEM (IDS) USING ROUGH SET (RS) AND GENETIC ALGORITHM (GA)

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The main function of the IDS (Intrusions Detection System) is to protect the system, analyze, and predict the user's habits. This habit used see the normal activity or intrusion activity. IDS has been developed, however high alert messages make managers/system administrators maintain the network ineffective. In this study IDS used rough set and genetic algorithm to detect intrusion. Rough set was used for preprocessing data and reduced the dimension data / feature selection. That data was used genetic algorithm for classifying training and testing data. GA has better accuracy rate, false positive rate than Chen *et al* and GA+RST. However GA+RST has better attack detection rate than Chen *et al* and GA.

Keywords: Rough set, Genetic Algorithm, IDS.