EVALUATION OF INTRUSION DETECTION TECHNIQUES AND ALGORITHMS IN TERMS OF PERFORMANCE AND EFFICIENCY THROUGH DATA MINING

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ABSTRACT

Data mining has been one of the approches used as a foundation then there is a érection of intrusion detection systems (IDS).Various algorithms and techniques have been développe to make out different types of vulnérabilités. These techniques help to recoder the performance of the detection of vulnerabilities, calculâtes the overheads, and to make Dataset efficient without redundancy. However there is no heuristic to corroborate the accuracy of their results. In this paper we study the techniques and algorithms of the detection of known and unknown attacks through data mining. The methods, metrics and datasets are used to find the known and unknown attacks through data mining. The various techniques like , Scoring Techniques, Attack generalization technique, Language model techniques, Novel hybrid technique, C4.5 decision algorithm, Nearest neighbour, Rough Set Theory(RST), Support Vector Machine(SVM) ,Statically Techniques, Ensemble boosted decision tree, apriori algorithm, Rule based techniques Association and Sequence techniques, are used to detect the vulnerabilities through Data mining. In this paper, we have described the outline of all the algorithms and techniques to identify their strengths and limitations.

KEYWORDS: KDD'99 Dataset, Attacks, IDS, Data Mining, Learning Techniques, Decision Techniques