Analisis Perbandingan Algoritma K-Nearest Neighbor dan Decision Tree Dalam Mendeteksi Distributed Denial of Service

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Abstract

Distributed Denial of Service (DDoS) attacks are attacks carried out by several attackers by flooding the victim's device with a packet. Ease of carrying out DDoS attacks causes an increase in these attacks in network traffic. The method of non-machine learning Intrusion Detection System (IDS) is currently not very accurate, so we need an IDS method with machine learning (ML) that is more accurate in detecting attacks. Several previous studies have known that the K-Nearest Neighbor (KNN) and Decision Tree (DT) algorithms are two algorithms with high accuracy in detecting DDoS attacks. However, there is currently no research comparing the two algorithms. In this study, a comparative analysis was carried out between the two algorithms. The result of this study is that DT has a higher accuracy with an accuracy value of 99,91% than KNN which only has an accuracy value of 98,94% in detecting DDoS attacks.

Keywords: ddos, knn, decision tree