Project Title: ANALYSIS & DETECTION OF DDOS ATTACK USING MACHINE LEARNING TECHNIQUES

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| **Abstract**  **Distributed Denial of Service attacks fall under the category of critical attacks that compromise the supply of the network. DDos attacks continue to grow rapidly so to detect and mitigate these attacks became a challenging task. This work is carried out on a portal built on local server and a brand-new dataset will be generated with Intrusion Detection System. Tor Hammer tool was used as an attacking mechanism. The work incorporates various machine learning algorithms: Support Vector Machine, Decision Tree, KNN and Logistic Regression for classification.**  **Problem Statement**  **The main aim of our project is to process newly generated dataset for DDOS detection and to increase the accuracy of the detection rate in DDOS attack. Our other main objectives are to, identify whether the traffic data is suspicious or normal, To reduce false negative rate in distributed denial of service ( DDOS ) and to get good detection rate.**  **Project Team**   1. DHIVAKAR A K (1EP17CS019) 2. PRUTHVI S (1EP17CS063) 3. SANTHOSH E (1EP17CS076) 4. SHREYA M (1EP17CS082)   Under the guidance of,  Dr. Emilin Shyni C  PROFESSOR, Dept of CSE  **System Designs**  DDOS 1WhatsApp Image 2021-05-19 at 1.04.29 PM  **Conclusion & Applications**  **Machine learning classification algorithms were applied to the data set namely Support Vector Machine, Decision tree, KNN and Logistic Regression. After considering all the algorithms and implementing them in the model SVM algorithm showed greater results compared to other algorithms. The SVM model’s high performance and It’s wide variety of classification problems includes high dimensional and not linearly separable problems. Our experimental results show that applying one-class SVM anomaly detection methods on our browsing behaviour instances can discriminate between normal behaviour instances and the attack behaviour instances. Our main application is to mitigate DDoS attack on the cloud platform.** |