Team 3

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Problem Motivation

Detection of Trojan Traffic using Binary Classification.

Problem Definition

In today's technologically advanced world, the threat of cyberattacks has become a significant concern for individuals, businesses, and governments alike. One of the most insidious types of attacks is the Trojan horse, a malicious software that disguises itself as a harmless file or program. Detecting and preventing these attacks is crucial to maintaining the security of our digital systems.

The Trojan horse can penetrate the system or network when they are invited by the users unknowingly through the visiting of unknown and malicious websites or installing the software. So, Trojan horse can be better understood and realized by monitoring the network and capturing the network packet. The present dataset contains the malicious (Trojan category) and benign network packets which can be used to detect Trojan horse.

Data-Set Link

https://www.kaggle.com/datasets/subhajournal/trojan-detection

Evaluation Metrics

1. Accuracy
2. Precision
3. Recall
4. F1-Score
5. Training Time
6. Model Size
7. Prediction Time
8. AUC-ROC graph