Team Details

# Project ID: PW22VJ01

**Project Title: Detecting Security Vulnerabilities using Machine Learning Models Team Members:**

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# Project Guide: Prof. Vinay Joshi Project Abstract:

Machine Learning and Artificial Intelligence have established their own footprints in various domains and its applications. Machine Learning techniques are used in different areas of the Cybersecurity field such as Network Traffic Analysis, Detection of Attacks and Anomalies. All Cybersecurity tasks can be divided into five categories such as Monitoring, Detection, Prediction, Prevention and Response.

We are building a cybersecurity tool that runs a machine learning model to combat cyber breaches and frauds. Machine Learning Models include Logistic Regression, Isolation Forest, Decision Trees, etc for detecting frauds and anomalies such as breach as terms of use, Identity theft, Self-Delivery fraud. Detection of Frauds includes monitoring the different users and their behavioral patterns in order to evaluate, detect or avoid undesirable behavior. Our cybersecurity tool is meant to ease the work of a human by detecting anomalies faster by analyzing the data and logs and training on them.

**Keywords** - Machine Learning, Artificial Intelligence, Logistic Regression, Isolation Forest, Decision Trees, Breaches as term of use, Identity theft, Self-Delivery Fraud