AI/ML Networking– Smart Threat Detection Dashboard

**Problem Statement: AI/ML Networking – Smart Threat Detection Dashboard**

In the face of growing cyber threats such as phishing, SQL injection (SQLi), cross-site scripting (XSS), and data breaches, traditional security tools often lack the speed and intelligence needed to detect real-time malicious activity.

To bridge this gap, Guard URL provides an AI-powered threat detection dashboard capable of analysing URLs, classifying attack types, and presenting real-time insights through an intuitive interface. This allows users and organizations to stay alert, mitigate risks, and enhance online security.

**Team members: (Gopalan College of Engineering)**

* Meghana M Reddy
* U.S.S.Rohan
* M Rene Norah
* Babitha C S

**Architecture Flow:**

A close-up of a sign

AI-generated content may be incorrect.

**Work done by :**

1. **Meghana M Reddy**

Worked on main Python code development, especially the Streamlit web application, model integration, and threat detection logic.

Collaborated with team members to test, debug, and enhance user experience (like confidence scores, pie chart, etc.).

**2**. **U.S.S.Rohan**

Assisted in writing Python functions like extract\_features() and helped with modifying logic for threat classification

Contributed to creating test datasets and evaluating prediction outputs.

**3**. **M Rene Norah**

Took charge of file organization, GitHub upload, and created the README.md file.

• Also worked on checking file formats and ensuring compatibility.

**4**. **Babitha C S**

Helped in designing the folder structure, collecting URL samples, and setting up the project directory.

Provided suggestions for improving the layout and user instructions.