

Phishing Website Detection – AI-Powered Tool that Detects Phishing Websites Based on URLs

The **Phishing Website Detection** project is an **AI-driven security tool** designed to identify and block **phishing websites** by analyzing **URLs and website content**. Phishing attacks are a major cybersecurity threat, tricking users into providing sensitive information such as passwords and credit card details.

The system extracts features from URLs, including **domain age, HTTPS usage, IP-based domains, and keyword analysis**, to classify websites as legitimate or phishing. It uses **machine learning classifiers such as Random Forest, Decision Trees, and Neural Networks** to achieve high detection accuracy.

The frontend is built with **Flask/Django**, while the backend uses **Python (Scikit-learn, TensorFlow)** for model training. The system can be integrated into **web browsers as an extension** or deployed as an API-based service.

By providing **real-time detection and blacklisting**, this project helps prevent **phishing attacks and enhances user security online**.