VENKATESH .V

Summary

As a B.Tech student specializing in Cybersecurity and the Internet of Things, I possess a strong foundation in technology and problem-solving. My hands-on experience includes developing cybersecurity solutions focused on threat detection and vulnerability assessment. I leverage machine learning and AI to enhance security frameworks, demonstrating my commitment to advancing technology and creating impactful solutions.

Education

Sri Ramachandra Faculty of Engineering and Technology, SRIHER B. Tech in

Cybersecurity & IoT 86% Percentage

Tamilnadu, India Aug 2021 – May 2025

Porur, Chennai,

St Joseph's

Secondary School

82% Percentage

Experience

Researcher

Automating Penetration Testing

- Implemented a Q-Learning framework for enhancing security in Vehicle Ad-Hoc Networks.
- Proposed a hierarchical deep reinforcement learning model to improve automated penetration testing.

Security Analyst

2FA Evaluation

• Evaluated the significance of Two-Factor Authentication (2FA) in full-stack web development.

Developer

Nurse Performance Monitoring

- ^o Developed an Android application for assessing nurse performance through interactive assessments.
- ° Utilized MySQL for efficient question management and score tracking.

Developer

WebApplication Security

• Implemented a multi-factor authentication system enhancing user security via three layers.

Developer

Chatbot Development

° Created a chatbot with SQLite for user interaction and conversation history management.

Research Papers

Class Specific Feature Selection Method for Text Classification

Developed a class-specific feature selection algorithm that significantly improved text classification performance, achieving an accuracy increase of over 37%.

Explainable AI Model in Heart Disease Classification

Developed a novel Explainable AI model for heart disease classification with 98.41% accuracy, utilizing Grey

Wolf Optimization for hyperparameter tuning.

Projects

Encrypt & Decrypt App

Designed an Encrypt & Decrypt App enabling secure communication through AES, DES, and RSA encryption with a responsive, user-friendly interface.

• Utilized CryptoJS and JSEncrypt libraries to implement robust encryption and decryption processes.

Backend Setup for User Management System

Set up a backend user management system with Flask and SQLite, including database design and automation of data validation and insertion processes.

• Utilized Python scripting for creating a virtual environment, handling errors, and streamlining backend workflows.

Image Encryption Tool Development

Developed a Password Strength Analyzer using React during an internship at Pinnacle Labs, implementing advanced password analysis logic.

• Enhanced skills in React and CSS while applying security best practices for a user-friendly experience.

Technologies

Programming Languages: Python, Java, JavaScript, PHP, SQLite, MySQL

Skills: Cybersecurity, Internet of Things (IoT), Artificial Intelligence, Cloud Security, Forensics,

Database Management (DBMS), Machine Learning

Hobbies

- Cricket Music
- Cinematic Arts