M Harinee

harineemanikandan@gmail.com | +91 7550110045 | harineemportfolio.netlify.app | Linkedin | Github

Education

Shiv Nadar University Chennai

B. Tech Computer Science and Engineering (IoT) | CGPA- 8.83/10 *Aug 2023 - Jun 2027*

- **Coursework:** Data Structures and Algorithms, Object Oriented Programming, System Design, DBMS.
- **Involvement:** AI/ML Core Committee Member- Coding Club.

Vels Vidyashram Thalambur, Chennai

CBSE | Class 12th | Percentage- **97.6%** *2022 - 2023*

CBSE | Class 10th | Percentage- **92.2%** *2020 - 2021*

Skills Summary

- **Languages:** Python, C, Java, MySQL.
- **Web Development:** HTML, CSS, JavaScript, React, Django, Flask.
- **Tools:** Visual Studio Code, Microsoft Office, Google Colab, GitHub, SQL Workbench, Eclipse, Figma, Tinkercad.

Experience

AI Intern- Edunet Foundation *Nov 2024 – Present*

- Developed a sustainability chatbot using **Natural Language Processing**, achieving **87% accuracy** in answering user queries.
- Currently working on **improving ML models** for higher accuracy and **integrating external data** to enhance chatbot performance.

Research on GANs and Object Detection *Oct 2024- Present*

- Researching **GANs** under **Dr. M. Amsaprabhaa** at SNUC for **synthetic data-driven object detection**.
- Focused on **improving model performance** with **YOLO frameworks** and preparing datasets for potential publications.

Projects

GraphGuard | SOURCE *Jan 2025*

- **GraphGuard** uses **graph-based algorithms** and **machine learning** to analyze **transaction data**, detect **fraud patterns**, and help **banks** prevent **unauthorized transactions**, reducing **financial crime**.
- The system implements algorithms like **BFS**, **DFS**, **Union-Find**, **Dijkstra's**, and **Tarjan's SCC**, with **Logistic regression** for risk scoring.
- Built with **Flask** for the backend and **HTML/CSS** for the frontend, the web application efficiently detects and analyzes fraud.

CropCare-AI | SOURCE *Mar 2024*

- **CropCare-AI** leverages **AI** to detect **plant diseases** early by analyzing **leaf images** and integrating **real-time weather data**, helping **farmers** proactively protect their **crops**.
- The system achieved **92% accuracy** in disease detection, providing reliable insights for crop health monitoring.
- **Tech Stack:** TensorFlow (VGG16), OpenCV (image processing), HTML, CSS, JavaScript (web interface).

SpeedScan_OCR | SOURCE *Oct 2024*

- **SpeedScan_OCR** aims to find the **best model** for detecting **vehicle speeds** and **license plates** from traffic video feeds to identify **violators** and **unregistered vehicles**, enhancing **road safety** and **traffic monitoring**.
- **YOLOv11** outperforms **YOLOv8** in key metrics, achieving **98.19% accuracy**, **98.55% precision**, **95.54% recall**, and **97.02% F1-score**, making it highly effective for object detection tasks.
- **Tech Stack:** YOLOv8, YOLOv11, OpenCV, Python, SMS/email alert integration (Future Enhancements).

Achievements

- **Envithon Winner:** Created an AI-driven crop disease prediction system using TensorFlow (VGG16) and OpenCV.
- **Ideas to Impact (i2I) Top 100:** Proposed a mobile demolition waste separation unit that processes construction waste on-site, aiming to reduce costs, emissions, and promote a circular economy.
- **Finalist, Anna University Hackathon** – Reached the finals with a solution tackling misinformation.
- **SheFi Scholar:** Awarded a full scholarship for academic and extracurricular excellence, focused on Web3.
- **Selected for SIH Internal Hackathon** – Chosen to represent in SIH for creative problem-solving.