Vyshnavi Madhusudhan

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EDUCATION

VIT Bhopal University
Bachelor of Technology in Computer Science and Engineering — Sep 2022 – Present
CGPA: 8.48 — Bhopal, Madhya Pradesh

SKILLS

Programming: **Python**, C++, Java
AI / ML: Machine Learning Fundamentals, Computer Vision, Data Preprocessing
Web & Backend: React.js, Node.js, Express.js, REST APIs, Socket.IO
Databases: MySQL
Core CS: Data Structures & Algorithms, OOP, DBMS, OS, Computer Networks

INTERNSHIP

Web Developer Intern | Nayara Energy Limited — Oct 2024 – Dec 2024
- Developed scalable frontend modules for an internal marketplace using **React.js**.
- Integrated **REST APIs** for product listings, search, and admin workflows.
- Collaborated with backend teams to validate API contracts and handle edge cases.
- Improved UI navigation and usability, contributing to **25% productivity improvement**.
- Used **Git** for version control in a production environment.

PROJECTS

AI Virtual Keyboard — Apr 2024
- Built a **Python-based virtual keyboard** using computer vision and real-time hand tracking.
- Implemented gesture recognition with **MediaPipe + OpenCV**, achieving **92% keystroke accuracy**.
- Reduced input latency from **250ms to 80ms** through optimized frame processing.
- Designed visual feedback–driven UI, improving accessibility for differently-abled users by **40%**.
- Maintained stable **30 FPS** performance, increasing typing speed by **20%**.
- **Tech Stack: Python, OpenCV, MediaPipe**

Crop Disease Detection System — Mar 2024
- Developed a **Python-based ML system** to detect crop diseases from leaf images.
- Performed image preprocessing (resizing, normalization, noise reduction) to enhance accuracy.
- Trained and evaluated classification models on labeled datasets for multiple disease categories.
- Integrated **OpenCV** for real-time image handling and prediction visualization.
- Enabled early disease detection to support preventive agricultural decision-making.
- **Tech Stack: Python, Machine Learning, OpenCV**

ACHIEVEMENTS & EXTRACURRICULARS

Frontend Developer, Heritians Organization — Aug 2023 – Jan 2024
- Collaborated with **VIT Bhopal & Unnat Bharat Abhiyan** on sustainable village initiatives impacting 1000+ villagers.

Web Developer, Health-O-Tech Club — Jul 2022 – Dec 2024
- Maintained club projects and official website for smooth functionality and UX.

Technical Team Member, Cisco Community VIT Bhopal — Jun 2024 – Nov 2024
- Supported technical workshops and competitive events.

Achievements
- Qualified Smart India Hackathon 2023 (cleared all internal rounds).
- Top 20 — NASA International Space Apps Challenge 2023.
- Open Source: GirlScript SoC (Top 120), Social SoC 2024, Hacktoberfest.