# LAVUDYA RAJARAM

+91-7093221536 | codeml862@gmail.com | Mahendergarh, Haryana, India

linkedin.com/in/lavudyaraja5228 | github.com/lavudyaraja | lavudyaraja.in

## Summary

Computer science undergraduate with robust experience in machine learning and full-stack development. Designed and trained a hybrid Vision Transformer and EfficientNet model achieving 98% accuracy for plant disease classification, and built AI-driven applications including a meeting management platform and decentralized training system. Proficient in Python, TensorFlow, PyTorch, and modern web frameworks, seeking a machine learning engineering internship.

## Education

**Central University Of Haryana** **Nov 2022 - Nov 2026**

*B.Tech, Computer Science & Engineering*

**CGPA:** 7.5/10

**TTWREIS Boys Narsapur** **Jun 2019 - Jun 2021**

*Board of Intermediate, PCM (Percentage:91%)*

## Key Projects

**Tomato Leaf Disease Classification using Hybrid Vision Transformer (ViT)** **Oct 2025 - Present**

***CUH Haryana*** *Haryana*

- Designed and trained a hybrid deep learning model combining Vision Transformer and EfficientNet architectures for automated plant disease recognition, achieving 98% accuracy through advanced data augmentation.
- Improved model performance by increasing accuracy by 10% and reducing inference time by 15% using timm, torchvision, NumPy, and PIL.
- Evaluated classical machine learning algorithms including KNN, SVM, Decision Tree, and Random Forest for multi-class plant disease prediction using robust feature extraction and preprocessing techniques.

**AI-Powered Meeting Management Platform** **Sep 2025 - Nov 2025**

- Implemented a full-stack video conferencing application using WebRTC, React, and Node.js, improving real-time peer-to-peer communication by 10%.
- Deployed a collaborative whiteboard with live synchronization, AI-driven meeting summaries, and speech recognition, increasing team productivity by 30%.
- Integrated AI-driven transcription, translation, and summarization features using the OpenAI API and Python to enhance meeting workflows.

**AI Training Platform with Blockchain Integration** **Oct 2025 - Nov 2025**

- Architected a full-stack AI training platform using Next.js, TypeScript, FastAPI, and Python with a scalable microservices-based design.
- Incorporated Sui blockchain and Walrus storage to enable transparent and distributed machine learning workflows.
- Enabled real-time training monitoring, gradient aggregation, contributor reward mechanisms, and MongoDB-backed persistence.
- Created an interactive dashboard with React Flow, wallet integration, and real-time analytics to visualize training progress and system performance.

**AI Platform Frontend** **Jan 2026 - Present**

- Developed a modern AI platform frontend using Next.js 15 and React 19, incorporating autonomous agent systems and retrieval-augmented generation (RAG).
- Improved user engagement and workflow efficiency by 25% through optimized UI components built with TypeScript and Tailwind CSS, including voice input and real-time chat.
- Strengthened overall user experience by delivering responsive, dynamic interfaces aligned with modern frontend best practices.

## Technical Skills

- **Programming Languages**: C, C++, Python, JavaScript, DSA, OOPS
- **Web & Backend**: HTML, CSS, Tailwind CSS, Next.js, TypeScript, FastAPI, REST APIs
- **Databases & Infrastructure**: MySQL, MongoDB (Beginner), Supabase, Prisma ORM, Redis, Celery
- **Machine Learning & Deep Learning**: Scikit-learn, NumPy, Pandas, TensorFlow, Keras, PyTorch, CNN, ViT, Hybrid ViT
- **Computer Vision**: Image Classification, Disease Detection, Streamlit
- **Tools & Operating Systems**: Git, Jupyter, Anaconda, LaTeX, MS Office, Windows, Linux

## Certifications

- Python for Machine Learning – Linear Regression: (Online Certification) Covered data preprocessing, model building, training, evaluation, and performance metrics using Python.
- Web Development Fundamentals: (HTML, CSS, JavaScript) (Online Certification) Gained hands-on experience in building responsive web pages and interactive user interfaces.
- C++ Programming: (Online Certification) Learned core programming concepts including OOP, data structures, and problem-solving using C++.