



# HEMANTH TIRUKOVALLURU

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📍 Hyderabad

💻 <https://github.com/Hemanth098>

## EDUCATION

Vasavi College of Engineering

Osmania University

CGPA: 8.04

2021 - 2025

Shine Junior College

Percentage: 86.2%

2019-2021

Shine High School

CGPA: 9.5

2018-2019

## SKILLS

- **Languages:** Python, C, C++, JAVA
- **Web Dev:** Node.js, Express.js, Flask, EJS, MongoDB, MySQL, SQLite
- **ML/AI:** Scikit-learn, TensorFlow, CNN, LSTM, Langchain
- **Tools:** Streamlit, Jupyter Notebook, Git
- **Soft Skills:** Leadership, Writing, Time Management

## ACHEIVEMENTS

- Secured 5th place in the National-Level Tech Hackathon — **Tech Savishkaar**, April 2024

## Summary

Software developer skilled in full-stack development and machine learning. Proficient in Python, Node.js, Flask, TensorFlow, and databases like MongoDB and MySQL. Built projects in fraud detection, AI pet care, and placement automation. Certified in Python, ML, and SQL with strong problem-solving and hands-on development experience.

## Academic Projects / Work Experience

March 2025 - Present

### Credit Card Fraud Detection System

**Skills Applied:** Deep Learning, CNN, LSTM, TensorFlow, Python, Streamlit

- Developed a hybrid CNN-LSTM model to detect fraudulent transactions in highly imbalanced datasets.
- Applied PCA for dimensionality reduction and reshaped data for temporal modeling.
- Optimized training using Early Stopping and Model Checkpointing.
- Evaluated model using AUC-ROC, F1-Score, and Precision-Recall metrics.

June 2024 - January 2025

### Pawfect – AI-Driven Pet Care Platform

**Skills Applied:** Flask, TensorFlow, LangChain, SQL, CNN, Web Dev

- Built an AI-based dog breed identifier using CNN integrated into a Flask web app.
- Developed a LangChain-powered chatbot for pet health queries.
- Added pet adoption functionality and optimized SQL queries for backend operations.

January 2024 - May 2024

### Placement Cell Automation Platform

**Skills Applied:** Node.js, Express, MongoDB, EJS, Full-Stack Web Dev

- Designed a full-stack platform to automate placement scheduling and eligibility filtering.
- Implemented three role-based dashboards: Coordinator, Student, and Admin.
- Integrated calendar view and student feedback module for interview tracking and experience sharing.