

Immani Rama Venkata Sri Sai

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Summary

Computer Science undergraduate (CGPA 9.03/10) with hands-on experience in machine learning, computer vision, generative AI, and embedded systems. Proficient in Python, C and C++ with practical exposure to deep learning frameworks including TensorFlow and PyTorch. Demonstrated ability to design and deploy end-to-end AI/ML solutions, RESTful APIs, and real-time embedded applications. Strong foundation in Data Structures and Algorithms, Operating Systems, DBMS, and Computer Networks. Actively seeking opportunities to contribute to impactful engineering projects.

Education

SRM Institute of Science and Technology, B.Tech in Computer Science and Engineering Aug 2023 – May 2027

- CGPA: 9.03 / 10.0
- Relevant Coursework: Data Structures & Algorithms, Object-Oriented Programming, Operating Systems, Database Management Systems, Computer Networks, Machine Learning, Theory of Computation, Data Science, Data Mining & Analytics

Technical Skills

Programming Languages: Python, Java, C, C++, SQL

Machine Learning & AI: TensorFlow, PyTorch, Scikit-learn, OpenCV, CNNs, Supervised Learning, Transfer Learning, NLP (Prompt Engineering), Generative AI (Google Gemini API), LLM Integration

Tools & Platforms: Git, GitHub, Google Colab, VS Code, MySQL, Google AI Studio, Vercel, Streamlit Cloud, Xcode

Core CS: Data Structures & Algorithms, OOP Design Patterns, Operating Systems, DBMS, Computer Networks

Experience

Inhouse Project Student, Eyantra Lab, SRMIST – Kattankulathur, TN Feb 2025 – Aug 2025

- Engineered a real-time gesture recognition system using the MPU-6050 IMU sensor, processing 6-axis accelerometer and gyroscope data to classify distinct hand movement patterns with high accuracy.
- Implemented signal preprocessing and calibration algorithms to reduce noise and improve gesture detection reliability by approximately 30%.
- Deployed wireless communication using Zigbee modules, enabling low-latency, stable device-to-device data transfer in real time.
- Validated system performance under varied conditions, achieving consistent sub-100ms response latency for gesture-based control inputs.

Projects

Leaf Disease Prediction System *Python, TensorFlow, OpenCV, Scikit-learn, CNN* Jul 2025 – Present
Github

- Developed and trained a Convolutional Neural Network (CNN) classifier on a plantvillage kaggle dataset, achieving robust multi-class classification of plant health conditions.
- Applied image preprocessing techniques including resizing, normalization, and segmentation to handle low-quality and noisy real-world inputs.
- Improved model generalization using data augmentation and supervised fine-tuning, reducing overfitting and boosting validation accuracy.
- Designed a modular ML pipeline separating data ingestion, preprocessing, training, and inference stages for maintainability.

AI Study Buddy *Python, Streamlit, Gemini API, Pandas, NumPy* Jul 2025 – Oct 2025
GitHub

- Built a full-stack AI-powered study assistant web application leveraging Google Gemini API for concept explanation, note summarization, quiz generation, and flashcard creation.

- Integrated secure API key management via environment variables and deployed the application on Streamlit Cloud for public accessibility.
- Structured a modular, maintainable codebase with feature-based separation of concerns and version-controlled the entire project using Git and GitHub.
- Implemented dynamic session state management to deliver a smooth, context-aware conversational experience.

Face Recognition Attendance System *Python, OpenCV, Tkinter, Pandas, Scikit-learn* Aug 2024 – Nov 2024
GitHub

- Prototyped an automated attendance system using real-time facial recognition with OpenCV's face detection pipeline and a trained ML classification model.
- Designed an intuitive Tkinter-based GUI supporting user registration, live camera feed, and attendance log export to CSV via Pandas.
- Achieved real-time inference by optimizing the face detection and recognition pipeline for low-latency operation on standard hardware.

Certifications

SAP Certified Generative AI Developer Feb 2026 – Feb 2027
Credly Badge

Oracle Fusion Cloud ERP Process Essentials Certified Dec 2025 – Dec 2027
Credential ID: 3248052490MBPERPCFA1
View Certificate

Oracle Cloud Infrastructure 2025 Foundations Associate — Oracle Dec 2025 – Dec 2027
Credential ID: 3248052490CI25FNDCFA
View Certificate

Networking Basics — Cisco Networking Academy Sep 2025
Credly Badge

Competitions & Achievements

Apple Swift Student Challenge 2026 Feb 2026
Submitted (*Swift Playground: GentleStep*) GitHub

Operating Systems Skill Test – CodeChef Score: 2800 / 3000 Oct 2024
• Top percentile performance demonstrating proficiency in process scheduling, memory management, and synchronization.

TCS CodeVita 2024 Participated Nov 2024

Adobe India Hackathon – Round 1 Aug 2025
Participated via Unstop Certificate

Workshops & Activities

Swift Student Challenge Workshop, SRMIST – Kattankulathur Jan 2026
• Received hands-on training in Swift programming fundamentals and gained ideation insights from previous Swift Student Challenge winners.

Discipline Committee Member, Directorate of Student Affairs, SRMIST Sep 2024 – May 2025
• Coordinated logistics and maintained discipline across college events, demonstrating leadership and organizational skills.