

# SARATH KUMAR NVS

Phone: 8790621444 | Email: nvssarath@gmail.com | LinkedIn: sarath-kumar-25b050256 | GitHub: SannyTusk16

## EDUCATION

**Vasavi College of Engineering, Hyderabad, India**  
Oct 2022 - June 2026  
**IIT Madras Online Degree Program, Online**  
Oct 2022 - Present

*B.E. in Computer Science and Engineering*  
GPA: 8.5  
*B.Sc. in Data Science and Applications*

## SUMMARY

Highly motivated Computer Science undergrad with a strong foundation in AI/ML and full-stack development. Proven ability to develop innovative solutions, as demonstrated by projects in LLMs and AI-powered applications. Seeking a challenging internship to contribute to cutting-edge projects.

## SKILLS

**Programming Languages:** C, Java, Python**Databases:** MySQL, MongoDB**Technologies:** AI, ML, GenAI, AWS, GitHub, NoSQL, RDBMS, Flutter, webRTC

## PROJECTS

### Sign Language Based LLM | July 2024

Developed a real-time sign language recognition system using OpenCV and MediaPipe to improve communication accessibility. Achieved 95% accuracy in recognizing 26 characters under varied lighting conditions with a processing speed of <16ms/frame. Integrated the recognition system with an LLM for query-response generation.  
*Technologies Used: Flutter, OpenCV, MediaPipe, Ollama*

### AI-Powered Research Assistant | 2024

Created AI agents using Crew AI to automate research tasks, enabling efficient processing of local PDFs and documents. Leveraged Ollama-based LLMs for document analysis and FAISS for fast vector search and retrieval. Built a FastAPI backend to provide a user-friendly interface.  
*Technologies Used: Crew AI, FastAPI, Lang Chain, FAISS, Ollama*

### Household Services App | Jan 2024

Developed Flask APIs and integrated a SQLite database for managing household services. Built the frontend with VueJS and implemented SMTP email service, JWT-based authentication, and SwaggerUI for documentation. Used Redis and Celery for background tasks and caching, and implemented webRTC-based video streaming.  
*Technologies Used: Python, Flask, MySQL, Redis, Celery, webRTC, VueJS*

## INTERNSHIPS

### IIT BHU, Hyderabad, Online

*Research Intern*

Dec 2024 Implemented Swin Transformer and saliency test methods; contributed to result interpretation.

### Aathi Yoga, Hyderabad, Online

*Backend Developer*

2025 Developed REST APIs in Ruby on Rails with JWT and MySQL integration.

### Mantrick Studios, Hyderabad, Online

*Head UI Designer*

Oct 2023 Designed 5 wireframes in Figma for client applications. Built initial versions of websites using HTML, CSS, and JS.

## EXTRACURRICULAR

**Vasavi College of Engineering, Hyderabad**  
2024 - 2025

*Department Head, Swayam AI/ML Club*

2022

*Smart India Hackathon Participant (Stage 1)*

2023

Feb 10-14, 2025

*AWS Workshop Participant*

VPC, ELB, IAM, Subnet Setup Practice