

# TRIVENDAR REDDY NUKALA

Hyderabad, Telangana

📞 +91-8309059324 📩 trivendarreddy25@gmail.com 💬 linkedin.com/in/trivendar-reddy-nukala 🌐 github.com/Trivendar-Reddy-Nukala

## EDUCATION

**Vasavi College of Engineering**  
*B.E - Computer Science and Engineering - **9.0 CGPA***

2023 – 2027

Hyderabad, India

## COURSEWORK

Data Structures & Algorithms — Operating Systems — Database Management Systems (DBMS) — Machine Learning — Object Oriented Programming — Full Stack Development — Computer Networks

## PROJECTS

**MediCamp AI** ↗ | React.js, Node.js, Gemini LLM, Web Speech API Apr 2025

- **AI-Driven Architecture:** Architected a full-stack healthcare platform utilizing **2 Generative AI agents** to automate manual symptom analysis and prescription verification, streamlining the patient diagnostic process and eliminating data entry bottlenecks.
- **Global Accessibility & UI:** Engineered a real-time speech-to-speech translation module within a responsive React interface using **5+ reusable components**, enabling instant communication across **6+ languages** via Google Cloud APIs.
- **Security & Scalability:** Safeguarded sensitive patient data via **Role-Based Access Control (RBAC)** and **JWT** authentication across **6+ protected API endpoints**, while refining backend middleware to handle high-concurrency traffic with minimal latency.

**Gesture-Based Medical Interface** ↗ | React.js, Python, OpenCV, MediaPipe, DeepSeek AI Jan 2025

- **Contactless Navigation:** Developed a sterile, hands-free interaction system using **OpenCV** and **MediaPipe**, enabling surgeons to control digital cursors via hand gestures with high precision in operating rooms.
- **AI-Driven Insights:** Integrated **DeepSeek AI** to process uploaded medical PDF reports, allowing professionals to extract key diagnostics and query patient data instantly without manual searching.
- **Real-Time Processing:** Constructed a low-latency pipeline between the **React.js** frontend and Python backend, ensuring immediate gesture response and seamless document analysis under varying hospital lighting conditions.

**Ahara Vastra Charity Platform** ↗ | MERN Stack, REST APIs, Tailwind CSS Mar 2025

- **Backend & Security:** Developed a secure full-stack infrastructure connecting charities with donors, utilizing **JWT authentication** to protect **8+ API endpoints** and ensure safe data transmission.
- **Frontend Architecture:** Engineered a modular React UI with **4+ reusable components** for advanced filtering, reducing code redundancy and establishing consistent design patterns across the application.

## TECHNICAL SKILLS

**Languages:** Python, Java, C, JavaScript, SQL, NoSQL

**Web Technologies:** ReactJS, NodeJS, ExpressJS, MongoDB, REST API Design, JWT, Mongoose

**Developer Tools:** Git, GitHub, VS Code, Postman (API Testing), Vercel/Netlify Deployment

## ACHIEVEMENTS

**National Hackathon Winner (Techsaviskaar 3.0):** Secured **1st Rank** out of 500+ teams by developing a deployable HealthTech prototype within an **8-hour deadline**; demonstrated rapid prototyping and team leadership.

## EXTRACURRICULAR

**MUN - Vasavi College of Engineering** ↗

Oct 2025

*Organizing Member*

Hyderabad

- **Event Coordination:** Collaborated with a **40-member team** to successfully execute a college event for **400+ participants**, managing venue logistics and resolving payment queries to ensure zero operational discrepancies.

## CERTIFICATIONS

• Google Agentic AI

• DSA in Java (NPTEL)

• Problem Solving through C (NPTEL)