

## PROFILE SUMMARY

A versatile developer in full-stack engineering (MERN, React) and applied machine learning, complemented by strong leadership experience in managing teams and fostering collaboration.

## EDUCATION

**Bachelor of Technology CSE Core** – Vellore Institute of Technology, Chennai  
CGPA: 9.09

## EXPERIENCE

**Summer Research Intern**  
*Dataset Curator & Research Assistant*

*Jun 2025-Jul 2025*  
*VIT Chennai*

- Curated **200+ question-answer pairs** for educational NLP pipelines, aligned with curriculum objectives.
- Applied **Retrieval-Augmented Generation (RAG)** to generate **125 high-quality questions**
- Explored **Knowledge-Augmented Graphs (KAGs)** and **Neo4j (Cypher, APOC)** for triplet extraction and knowledge graph automation.

## PROJECTS

**NoteApp** | Full-Stack Application

- Engineered a full-stack, real-time note application using the MERN stack, designing RESTful APIs for all CRUD operations.
- Integrated Redis for caching to improve performance and developed a responsive React front-end with Tailwind CSS for a modern UI.

**YOLO Model** | Fruit Recognition (DeepNIR Dataset)

- Developed and trained a YOLO object detection model to accurately identify and classify fruits from the DeepNIR agricultural dataset.
- Managed the end-to-end model lifecycle, from comprehensive data preprocessing and augmentation to rigorous performance evaluation using mAP.

**Comprehensive Student Portal** | Front-End Development

- Built a responsive and interactive front-end for a student portal using React to create an intuitive and modern user experience.
- Implemented key features including dynamic dashboards for data visualization and a complete authentication UI with client-side validation.

**Book Recommender AI** | Machine Learning System

- Engineered a personalized book recommendation system by cleaning, processing, and analyzing a large dataset of user reviews and ratings.
- Applied sentiment analysis to user reviews to extract nuanced preferences, generating more accurate and context-aware book recommendations.

## TECHNICAL SKILLS

- Languages & Programming:** Python, JavaScript, SQL, Java, C++
- Web Development:** React, Vite, Tailwind CSS, Node.js, Express.js, REST APIs
- Databases & Storage:** MongoDB, Redis
- Machine Learning & AI:** YOLO
- Tools & Platforms:** Git, Docker (basic)

## LEADERSHIP AND INITIATIVE

- Design Lead, AGRHI Innovators Club:** Championed an inclusive club culture by leading and excelling design projects and contributing to collaborative technical projects.
- Event & Team Management, University Cultural Clubs:** Directed the end-to-end execution of major university events, leading teams to manage logistics for 500+ attendees.