

# AMBATI JAYA CHARAN

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## EDUCATION

Kalasalingam Academy of Research and Education,  
Bachelor of Technology in Computer Science and Engineering (CGPA – 8.01/10.0)  
Sri Sarada Junior College  
Pre-University Course (Percentage: 79 %)

KrishnanKoil, Virudhunagar, India  
2022 - present  
Vijayawada, India  
2020 - 2022

## SKILLS SUMMARY

- **Languages:** Python, SQL.
- **Frameworks:** FastAPI,Alembic,LLM's, LangChain,RAG,Flask, Hugging Face, Transformers,Selenium.
- **Tools:** Power BI, Excel, PowerPoint, Postgresql,Git,Github,Docker.
- **Areas of Interest:** Generative AI, building applications using Python & Web Technologies, Data structures and Algorithms.
- **Soft Skills:** Rapport Building, Strong Stakeholder management, People Management, Excellent communication.

## WORK EXPREIENCE

AI Intern | Nyayatech  

- o Built an end-to-end automation system for court case and hearing management.
- o Developed a FastAPI-based backend integrated with external APIs for real-time data updates.
- o Automated data extraction and validation using Selenium and ETL logic for seamless syncing.
- o Designed scalable PostgreSQL models with Alembic migrations for evolving business needs.
- o Implemented intelligent PATCH notifications and ensured API compliance with robust error handling.
- o Containerized and deployed the platform using Docker with environment-based configuration.

JULY 25 - Present

Research Student | Multicore Wave  

- o Worked on creating an image dataset, collecting and annotating 50,000+ images using LabelStudio.
- o Performed data preprocessing to enhance model performance.
- o Gained hands-on experience with ROS2 and SLAM, completing robotic mapping and localization crash courses.

Aug 23 - Dec 24

## PROJECTS

LawGPT | LINK  

- o Built an AI-powered legal assistant leveraging **Google Gemini 1.5 Flash** for real-time, context-aware legal research and conversational support.
- o Developed an interactive chat UI that provides accurate, AI-driven answers to legal queries based on updated legal data.
- o Designed for law students, researchers, and professionals to simplify complex legal topics and access statutes and case law efficiently.
- o **Technologies Used:** Python, LangChain, Google Gemini 1.5 Flash , AWS Hosting,React.

April-2025

ID and Formal Dress Detection| LINK  

- o Developed a computer vision-based compliance monitoring system using **YOLOv12** for real-time ID card detection and **Google Cloud Vision API** for formal dress code verification.
- o Implemented automated violation capture with image saving and **email alerts** including zipped evidence for efficient monitoring.
- o Built a React-based web interface for live violation visualization and monitoring.
- o **Technologies Used:** Python, OpenCV, YOLOv12 (Ultralytics), Google Cloud Vision API, SMTP Email Automation.

MAY-2025

Natural Language to SQL Query App | LINK  

- o Developed a Streamlit-based web application that translates natural language queries into executable **MySQL SQL queries** using **LangChain** and **Google Gemini LLM**.
- o Enabled users to interact with a MySQL database without writing SQL, supporting dynamic query generation, execution, and result visualization.
- o **Technologies Used:** Python, Streamlit, LangChain, Google Gemini, MySQL, SQLAlchemy, PyMySQL.

MAY-2025

## ACHIEVEMENTS &CERTIFICATES

2nd Place Winner – The ComBattle Ideathon (IEEE ComSoc KARE)  

- o Recognized for innovative problem-solving and technical excellence, securing 2nd place and a cash prize in this competitive ideation event.

March 2025

## POSITION OF RESPONSIBILITY

Open Source Framework Lead | KARE Open-Source Society (KARE – OSS)  

- o Leading open-source development and fostering tech community collaboration.

JULY2024 - JUNE2025