

LIYANA M BAVA

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EDUCATION

Vellore Institute of Technology (VIT), Chennai <i>B.Tech in Computer Science and Engineering with specialization in AI & ML</i>	Chennai, Tamil Nadu
• CGPA: 8.45	2021 – 2025

EXPERIENCE

Associate System Engineer – Data Science & AI <i>IBM</i>	August 2025 - Present
• Contributing to enterprise-scale AI and analytics initiatives within the AI Analytics Edge & Automation program. • Supporting analytics and automation-focused AI solutions aligned with enterprise use cases.	Bangalore
EDA & Insights Team Lead <i>Omdena WUB Chapter</i>	June 2024 - September 2024
• Led a global team to conduct EDA on 500+ survey responses, deriving 15+ behavioral insights on Gen Z mental well-being through statistical analysis and pattern identification. • Applied NLP on 10,000+ text entries to enhance chatbot responses, improving user engagement by 30%.	World University of Bangladesh (Remote)
Artificial Intelligence Intern <i>Zenrion Technologies</i>	November 2023 - December 2023
• Built ML models to predict stock replenishment for a pharma client, reducing overstock by 20%. • Developed and deployed data-driven strategies to optimize inventory control and minimize waste.	Bangalore (Remote)

PROJECTS

ParaTrackNet: Real-Time Surgical Gland Detection System <i>OpenCV, Kalman Filter, CSRT, ORB</i> GitHub
• Achieved 96.78% accuracy and 97.2% F1-score in real-time tracking of parathyroid glands during ICG-assisted thyroidectomy. • Reduced false negatives by 98% vs. baseline CSRT, with 40ms/frame latency enabling real-time intraoperative performance.
MedAssist AI: Medical Decision-Support Assistant <i>Computer Vision, Ollama (Local LLM), Streamlit</i> GitHub
• Built a privacy-first tool that analyzes medical images + symptoms to generate brief, safe guidance with rule-based risk triage (LOW/MEDIUM/HIGH). • Added specialty-based clinic routing with Google Maps links and safety guardrails (non-diagnostic output).
Strategy Intelligence Tool: Multi-Agent Business Strategy Generator <i>LangGraph, Streamlit, Ollama</i> GitHub
• Built a fully local business-strategy generator using multi-agent reasoning (Analyst → Consultant → Strategist) with LangGraph and Ollama, delivering market insights, SWOT/PESTEL analysis, and executive roadmaps using locally served LLMs without cloud APIs. • Containerized the application post-development using Podman, enabling reproducible local deployment and execution of AI services across environments.
Full-Stack Task Manager <i>Golang, Next.js, MongoDB, WebSocket, JWT</i> GitHub
• Developed a task management platform with real-time multi-user collaboration, secure role-based access, and a responsive interface, using event-driven updates and optimized backend APIs for seamless task operations.

TECHNICAL SKILLS

Languages: Python, Java, C/C++, C#, JavaScript, SQL

Frameworks: TensorFlow, PyTorch, Keras, Streamlit, LangChain, LangGraph, CrewAI, Ollama, MLflow, React.js, Next.js, Node.js, WebSocket

Libraries: OpenCV, Scikit-learn, NLTK, Sentence Transformers, Cohere LLM, NumPy, Pandas, Matplotlib, Seaborn, RAG pipelines, Requests

Developer Tools: Git, GitHub, Docker, Podman, Kubernetes, Postman, VS Code, Jupyter Notebook, Google Colab

CERTIFICATIONS

AWS Cloud Practitioner | [Certificate](#)

Microsoft Azure AI Fundamentals | [Certificate](#)

NPTEL: Google Cloud Computing Foundations | [Certificate](#)