

# LIYANA M BAVA

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## EDUCATION

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

## EXPERIENCE

<b>Associate System Engineer – Data Science &amp; AI</b> <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
<b>EDA &amp; Insights Team Lead</b> <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)
<b>Artificial Intelligence Intern</b> <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

<b>ParaTrackNet: Real-Time Surgical Gland Detection System</b>   <i>OpenCV, Kalman Filter, CSRT, ORB</i>   <a href="#">GitHub</a>
• 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.
<b>MedAssist AI: Medical Decision-Support Assistant</b>   <i>Computer Vision, Ollama (Local LLM), Streamlit</i>   <a href="#">GitHub</a>
• 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).
<b>Strategy Intelligence Tool: Multi-Agent Business Strategy Generator</b>   <i>LangGraph, Streamlit, Ollama</i>   <a href="#">GitHub</a>
• 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.
<b>Full-Stack Task Manager</b>   <i>Golang, Next.js, MongoDB, WebSocket, JWT</i>   <a href="#">GitHub</a>
• 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

<b>Languages:</b> Python, Java, C/C++, C#, JavaScript, SQL
<b>Frameworks:</b> TensorFlow, PyTorch, Keras, Streamlit, LangChain, LangGraph, CrewAI, Ollama, MLflow, React.js, Next.js, Node.js, WebSocket
<b>Libraries:</b> OpenCV, Scikit-learn, NLTK, Sentence Transformers, Cohere LLM, NumPy, Pandas, Matplotlib, Seaborn, RAG pipelines, Requests
<b>Developer Tools:</b> Git, GitHub, Docker, Podman, Kubernetes, Postman, VS Code, Jupyter Notebook, Google Colab

## CERTIFICATIONS

<b>AWS Cloud Practitioner</b>   <a href="#">Certificate</a>
<b>Microsoft Azure AI Fundamentals</b>   <a href="#">Certificate</a>
<b>NPTEL: Google Cloud Computing Foundations</b>   <a href="#">Certificate</a>