

# Abde Ali Mewa Wala

[Github](#) | [LinkedIn](#) | [am3822@njit.edu](mailto:am3822@njit.edu) | (862)-622-9898 | Jersey City, NJ-07306

## EDUCATION

M.S. Data Science, New Jersey Institute of Technology – Newark, NJ, USA  
B.E. Electronics & Communication, RGPV - India

Jan 2024 - Dec 2025  
Aug 2012 - Jun 2016

## PROFESSIONAL SUMMARY

AI Engineer with 6+ years of DevOps and Cloud experience, now specializing in building intelligent systems using LLMs, RAG, LangChain, and LangGraph. Pursuing M.S. in Data Science to strengthen AI-first development with scalable infrastructure and data-driven decision-making. Passionate about unifying software, cloud, and agentic reasoning to deploy generative/Agentic AI solutions.

## ACADEMIC PROJECTS

### Generative/Agentic AI Projects

**EchoScribe – Multimodal GenAI Publisher** | *LangChain, LangGraph, OpenAI LLMs, FAISS, FastAPI, Streamlit, Hugging Face Transformers, Pydantic*

- Built a LangGraph-based GenAI system integrating LangChain, FAISS vector DB, and OpenAI LLMs to generate structured blogs from topics, research papers, and YouTube transcripts, using RAG-driven context enrichment.
- Designed a FastAPI backend + Streamlit UI with human-in-loop approval stages, external tool integration (Wikipedia, Arxiv, Tavily), and deployment-ready APIs for scalable workflows.
- Improved content drafting speed by 70%, ensured factual accuracy with retrieval pipelines, and published blogs automatically to Dev.to, demonstrating production-grade multimodal agent orchestration.

**RecoMind AI – Intelligent Product Recommender** | *LangChain, LangGraph, FAISS/Pinecone, SQLAlchemy, FastAPI, Streamlit, Docker, Kubernetes, AWS*

- Engineered a hybrid RAG + SQL-powered chatbot that retrieves context from vector databases (FAISS/Pinecone) and executes live SQL queries via SQLAlchemy, delivering accurate, real-time product recommendations.
- Enhanced retrieval quality with semantic search and LangGraph-based orchestration, while integrating FastAPI services, Streamlit UI, and cloud-native deployment (Docker/Kubernetes on AWS) for a scalable, production-ready system.

**VibeCheck AI – YouTube Comment Sentiment Analyzer** | *Python, Flask, MLflow, DVC, LightGBM, TF-IDF, Pandas, AWS S3, Chrome Extension*

- Built an end-to-end NLP pipeline using TF-IDF + LightGBM for sentiment classification, with NLTK preprocessing, lemmatization.
- Applied MLOps practices with DVC + MLflow (model registry & experiment tracking), ensuring reproducibility, scalability, and governed staging.
- Deployed a Flask API + Chrome Extension integrated with AWS S3 & Docker, enabling real-time inference and interactive sentiment insights.

## WORK EXPERIENCE

### New Jersey Institute of Technology

**Teaching Assistant, Newark, NJ, USA | 2024 – Present**

- Contributed to Computer Systems & Networks as a Teaching Assistant by facilitating office hours, managing assignments, & resolving issues

### LTI-Mindtree

**Senior Software Engineer, Pune | July 2022 – January 2024**

- Directed cloud-native microservices architecture on AWS & OpenShift, spearheading the team's DevOps charter and driving scalable, secure delivery.
- Championed CI/CD automation with Jenkins, Docker & Python, integrated SSO: Windows AD, enhanced security reducing redundant login by 40%.
- Transformed QA by moving testing to cloud (70% faster cycles), deployed an AI-powered ticketing chatbot on OpenShift, earning formal recognition.

### Synechron Technology Solutions

**Senior Associate, Pune | September 2021 – July 2022**

- Engineered AWS cloud infrastructure with Terraform and orchestrated Kubernetes + Helm deployments, ensuring scalability and high availability.
- Strengthened platform security & reliability by enforcing RBAC policies, streamlining workflows & integrating Kong API Gateway for secure routing.
- Accelerated release cycles by ~30% through CI/CD pipeline refactoring and continuous delivery improvements across cloud-native microservices.

### Cognizant Technology Solutions

**Senior Systems Engineer, Pune | February 2017 – September 2021**

- Crafted robust CI/CD pipelines utilizing Jenkins Shared Libraries, Docker-Kubernetes deployments, Terraform IaC for cluster provisioning.
- Gained exposure to AWS (EC2, EKS, ELB, IAM, ASG) and improved provisioning & log workflows by 20% using Ansible & Bash.
- Collaborated across diverse tech stacks, earning client recognition while strengthening hands-on skills in modern DevOps practices.

## TECHNICAL SKILLS

- Cloud Infrastructure & DevOps:** AWS, Terraform, Jenkins, Docker, Ansible, Kubernetes, AWS EKS, OpenShift, Linux, CI/CD
- Tools & Technologies:** Spark, Oozie, AWS EC2, Route53, S3, Redshift, Athena, API gateway, Lambda, Elastic Beanstalk, EMR, Hadoop, HDFS, Search Algorithms, Agile, Scrum, Jira, Git, Azure.
- Programming Languages & Databases:** Bash script, Python, Groovy, SQL, RDS, Hadoop, Spark, MongoDB, Snowflake, Neo4j, R.
- Machine Learning & Artificial Intelligence:** SciKit-Learn, PySpark, NumPy, Pandas, TensorFlow, and MLOps CI/CD pipeline
- Generative AI & LLM Development:** LangChain, LangGraph, Hugging Face Transformers, Retrieval-Augmented Generation (RAG), Prompt Engineering, Agents, Vector DBs (FAISS, Pinecone), Semantic & Hybrid Retrieval, Contextual Compression, Guardrails, Human-in-the-Loop (HITL)
- Application & Interface Development:** Streamlit, Gradio, FastAPI, SQLAlchemy, Pydantic, Output Parsers