

MOHAMMED ARSHAD HUSSAIN

AI/ML Engineer | Generative AI, RAG & Backend Engineering

Hyderabad, India | GitHub: arshadhussain45 | LinkedIn: arshadhussainmohammed

PROFILE

AI/ML Engineer building practical intelligent applications across LLM pipelines, retrieval, APIs, databases and user-facing software. Hands-on work in Generative AI, RAG, computer vision and full-stack engineering.

PROFESSIONAL EXPERIENCE

AI/ML Engineer Trainee - arcofintech | Full-time, current

Transitioned from a six-month AI/ML internship into a full-time trainee role. Work spans AI agents, LLM-powered applications, RAG, LangChain, AI pipelines, API integration and Python/backend development.

SELECTED ENGINEERING PROJECTS

AI Coach Agent / RAG System

Built context-aware coaching around confusion signals and repeated questions, connecting FastAPI, LangChain, Nomic embeddings, PostgreSQL/pgvector and Groq. Additional engineering work; public repository unavailable.

AI Resume Analysis & Visualization Dashboard [Repository]

Processed multiple resumes and job descriptions with LangChain and Groq; validated structured assessments with Pydantic and presented comparisons through Streamlit and Plotly. Supports PDF, DOCX and TXT, with parallel candidate analysis. Connected to a 24-hour AI hackathon at Innomatics Research Labs.

TaskFlow - Task & Project Management [Repository]

Built React and Django REST workflows with JWT refresh, REST and GraphQL APIs, task assignment, pagination, Swagger documentation, automated tests and GitHub Actions CI. Locally runnable; production deployment is planned.

Enterprise Employee Management System [Repository]

Developed a React frontend and modular Django REST backend spanning employee records, authentication and HR-oriented domains including attendance, leave, documents, onboarding, notifications, organization and assets.

Real-Time Feedback Mechanism Using ML [Repository]

B.Tech major project using CNN-based video analysis to identify specified actions or behaviors and support performance assessment in collaborative learning environments.

TECHNICAL SKILLS

AI & data: Python, SQL, ML, Deep Learning, CNN, NLP, LLMs, RAG, LangChain, Groq, Pydantic, NumPy, Pandas, Scikit-learn, XGBoost

Application engineering: FastAPI, Django REST Framework, React, JavaScript, REST, GraphQL, JWT, PostgreSQL, pgvector, Redis, MySQL, SQLite, Neo4j

Tools & analytics: Git, GitHub Actions, Docker, Postman, Power BI, Plotly, Streamlit, Matplotlib

EDUCATION

Bachelor of Technology (B.Tech), 2025

CMR College of Engineering & Technology (CMRCET), Hyderabad, Telangana