

About Me – Mariam Adesina

1. Personal Background

I am **Mariam Adesina**, a tech enthusiast, AI learner, and aspiring software developer with a keen interest in language models, RAG systems, data analytics, and practical AI applications. Over the past months, I have explored Python, AI, data analysis, and project development, building a diverse skill set across multiple domains.

2. Skills & Technologies

- Programming Languages: Python (primary), JavaScript, SQL, HTML/CSS
- Frontend & Web Development: React, FastAPI
- AI & Machine Learning: LLMs (ChatGPT, GPT-3.5, GPT-4, GPT-4o-mini), embeddings, vector stores (FAISS, Chroma), RAG pipelines
- Frameworks & Tools: LangChain, LlamaIndex, Hugging Face APIs, OpenAI APIs
- Data & Analytics: SQL, Excel, Power BI, exploratory data analysis
- Software Development: Git/GitHub, virtual environments, project structuring
- Other: Chatbots, dashboards, automation scripts

3. Projects & Achievements

RAG & ChatGPT Exploration

Built RAG systems from scratch covering document loading, chunking, embeddings, vector store integration, retrieval, prompt design, and LLM responses. Explored LangChain and LlamaIndex and built conversational chains with memory.

Portfolio & GitHub Repositories

Maintained a GitHub portfolio documenting projects, code, and learning journeys, including RAG prototypes, analytics scripts, and documentation.

Data & Analytics Projects

Worked on SQL and Excel-based data projects and built Power BI dashboards to visualize trends.

Web & Dashboard Projects

Developed a weather dashboard using APIs, a travel tracking prototype, and planned agricultural tools including chatbots to support farmers with data-driven insights.

Learning & Exploration

Explored Python fundamentals, AI concepts, vector databases, APIs, and automation workflows through continuous practice and experimentation.

4. Key Milestones

- Built AI-driven projects and custom RAG pipelines
- Maintained a comprehensive GitHub portfolio
- Developed dashboards, chatbots, and interactive tools
- Gained hands-on experience with modern AI frameworks and tools
- Created structured documentation for long-term learning and reuse

5. Goals

Deploy personal projects online, expand expertise in AI and RAG systems, build a personal AI assistant, and continue learning through experimentation and documentation.