

## SAJID MIYA

[Portfolio](#) | [Email](#) | [Phone](#) | [GitHub](#)

### OBJECTIVE

AI-focused Computer Engineering undergraduate with hands-on experience building **LLM-powered systems, agent workflows, and retrieval pipelines** using FastAPI, LangGraph, and local LLMs. Strong in Python, backend engineering, and system design. Seeking to contribute to real-world **AI infrastructure, RAG systems, and agent-based applications**.

### EDUCATION

<b>Thapar Institute of Engineering and Technology</b> , Patiala, India	2027
B.E. Computer Science and Engineering	CGPA: 8.73/10
<b>St. Xavier's College</b> , Kathmandu, Nepal	2023
School Leaving Certificate (SLC)	GPA: 3.66/4.0
<b>The Old Capital Secondary School</b> , Gorkha, Nepal	2021
Secondary Education Examination (SEE)	GPA: 3.95/4.0

### TECHNICAL SKILLS

#### Languages:

Primary: Python  
Others: JavaScript, C++, C

#### Backend and APIs:

FastAPI, Flask, Node.js, Express.js, REST APIs

#### Frontend:

React.js, HTML, CSS

#### AI / LLM Systems:

LangChain, LangGraph, Ollama, Agent Workflows, Tool Calling

#### RAG & Retrieval:

AdaptiveRAG, AgenticRAG, CorrectiveRAG, Self-RAG, GraphRAG, RAPTOR, **LightRAG**

#### Vector Databases:

FAISS, ChromaDB, Pinecone

#### Databases:

SQLite, MySQL, MongoDB

#### Version Control:

Git, GitHub

## PROJECTS

### [Portfolio-Agent](#) - Local AI Assistant (LLM + Agent System)

Built a local-first AI assistant using FastAPI, LangGraph, and Ollama with multi-thread conversations, long-term memory, and tool-calling workflows. Implemented real-time streaming via SSE and dynamic model switching. Designed an offline-first system with SQLite-based persistence.

### Advanced [RAG Systems](#) Implementation Suite

Implemented multiple RAG architectures including AgenticRAG, GraphRAG, RAPTOR, and Self-RAG with pipelines for chunking, embedding, retrieval, and reranking. Integrated FAISS, ChromaDB, and Pinecone to compare performance across local and cloud vector databases.

### LLM Systems Engineering Lab ([LangChain](#) + [LangGraph](#))

Developed LLM pipelines using LangChain and LangGraph, covering sequential, parallel, and conditional workflows. Built tool-calling agents, memory systems, and streaming pipelines with database-backed persistence.

### [University Management System](#)

Developed a full-stack application using Flask and MySQL with role-based access control for managing academic workflows. Integrated email notification system for system events.

### [AI-Powered ASL Translator](#):

Built a computer vision system using OpenCV and MediaPipe to translate sign language from real-time video and images, including model training and performance evaluation.

### [Real-Time Chat Application](#)

Developed a WebSocket-based chat platform using Flask-SocketIO with authentication, chatrooms, and OTP-based recovery, enabling real-time communication.

Projects demonstrate practical implementation of LLM systems, RAG pipelines, and agent-based architecture. For more details, visit my [portfolio](#) and [GitHub](#).