

RAYYAN ASIM

AI Engineer | Generative AI | LLMs | RAG | Agentic AI | Backend Engineering

Karachi, Pakistan • +92 307 2208970 • rayyanasim19@gmail.com • linkedin.com/in/rayyanasim • github.com/QuantumCoderX7 • rayyanasim.me

PROFESSIONAL SUMMARY

Computer Science student at the Karachi School of Business and Leadership (KSBL) building enterprise AI systems for the State Bank of Pakistan — RAG pipelines, on-prem/cloud LLM deployment (vLLM, Ollama, Open WebUI), and production-grade backend services. Experienced across the full stack: knowledge ingestion, semantic retrieval, evaluation, and secure Azure deployment.

TECHNICAL SKILLS

AI/ML: LLMs, RAG, Agentic AI, LangChain, LangGraph, RAGAS, Prompt Engineering, pgvector, Embeddings, Vector Databases, Hugging Face Transformers

AI Infrastructure: Open WebUI, vLLM, Ollama, Apache Tika, SearXNG, MCPO Tool Servers

Backend & DevOps: FastAPI, PostgreSQL, Redis, Docker, Docker Compose, Nginx, Prometheus, Grafana, CI/CD, Azure, AWS

Languages: Python, SQL, JavaScript/TypeScript, C++, Bash

PROFESSIONAL EXPERIENCE

Enterprise AI Engineering Intern — State Bank of Pakistan (SBP)

June 2026 – Present

- Built **AskSBP**, an enterprise RAG assistant; ingested **3,900+** documents/circulars via Apache Tika with semantic indexing.
- Deployed **Qwen3** LLMs via vLLM, Ollama, and Open WebUI on Azure; implemented **pgvector** retrieval with the BAAL/bge-reranker-v2-m3 reranker.
- Evaluated and optimized RAG quality using **RAGAS** (faithfulness, relevancy, precision, recall), reducing hallucinations in internal testing.
- Containerized services with Docker Compose (PostgreSQL, Nginx, SearXNG, MCPO tool servers) with Prometheus/Grafana monitoring.
- Delivered **5+** FastAPI backend services supporting ITPMD use cases; collaborated cross-functionally on production rollout.

Embedded Systems & Computer Vision Intern — Milita Tech Solutions

February 2026 – June 2026

- Built an AI-enabled Smart Firing Range (SFR) using machine learning and computer vision for automated target detection and shot analysis.
- Integrated embedded hardware with vision-based sensing; contributed to frequency-hopping secure comms and UAV mission-critical systems.

Teaching Assistant — Karachi School of Business & Leadership

October 2025 – February 2026

- Teaching Assistant for Data Analysis & Modeling, Artificial Intelligence, Blockchain & Cryptocurrency, and Marketing Analytics courses.
- Held visiting/office hours to help students understand Data Analysis & Modeling concepts; supported grading, assessments, and LMS administration.

PROJECTS

- **SBP Economic Forecasting Dashboard** — FastAPI/React dashboard integrating Prophet, ARIMA, and XGBoost with configurable backtesting.
- **Financial Multi-Agent Research Platform** — LangChain/LangGraph multi-agent system for automated financial research and reporting.
- **Full-Stack AI Infrastructure** — Dockerized FastAPI/PostgreSQL/Redis backend with CI/CD for AI service deployment.

LEADERSHIP

- **Co-Founder & COO, KSBL ACM Student Chapter** (Sept 2025 – June 2026) — organized AI workshops and technical events; led cross-functional student teams.

EDUCATION

Karachi School of Business and Leadership (KSBL) — B.S. Computer Science, Expected August 2027

Relevant Coursework: Artificial Intelligence, Machine Learning, Data Science, Software Engineering, Database Systems, Computer Networks, Operating Systems

CERTIFICATIONS

Google Data Science Course • Introduction to SQL • Leading with Character