

Muhammad Shiraz Kamran

Rawalpindi, Pakistan · +92 335 0004172 · mshirazkamran@gmail.com

linkedin.com/in/mshirazkamran · github.com/mshirazkamran

Education

COMSATS University Islamabad

Bachelor of Science in Software Engineering (CGPA: 3.58 / 4.0)

Islamabad, Pakistan

Expected 2027

- **Relevant Courses:** Database Systems, Object-Oriented Programming (OOP), Data Structures Algorithms, Design and Analysis of Algorithms, Computer Networks, Programming Fundamentals (PF), Software Requirements Engineering, Software Design and Architecture.

Technical Skills

Languages

Python, Java, JavaScript, SQL (PostgreSQL, sqlite), HTML/CSS

Backend

FastAPI, Spring Boot, Node.js, Fastify, Hibernate, JPA

AI & Data

Sentence Transformers (NLP), Vector Embeddings

Cloud

VPS handling, DigitalOcean, AWS training intro, Netlify, Supabase

Tools & DevOps

Git, Docker, PostgreSQL, Supabase, Netlify, Jira, Postman

Frontend

React.js, React Router, Tailwind CSS

Certificates & Courses

Cisco Python Essentials 2, Intro to AWS Cloud with Labs

Projects

Hadith Semantic Search System | *Python, FastAPI, PostgreSQL, React, Docker*

[GitHub Repository](#)

- Developing a semantic search engine for Hadith using **FastAPI** and **SQLModel**, enabling meaning-based retrieval instead of simple keyword matching.
- Using **PostgreSQL**, **NumPy** and **Sentence Transformers** to generate and store vector embeddings for accurate similarity-based searching.
- Optimized system performance by pre-loading **NumPy** embeddings into memory at startup, significantly reducing query latency and response times.

Filebin CLI - Temporary File Sharing | *Python, Fastify (Node.js), Supabase*

[GitHub](#) · [PyPI](#)

- Developed a CLI tool for temporary file sharing using the Python **click** library and published it on **PyPI** with support for Python 3.7+.
- Built a backend using **Fastify** (Node.js) and **Supabase** to manage file metadata efficiently without needing to self-host the files.
- Implemented global rate-limiting to handle up to **4,000 requests per minute** to ensure the API remains stable under heavy traffic.

Munch n Vibes - Bakery E-Commerce | *React.js, React Router, CSS3, Netlify*

[Live Site](#)

- Developed a multi-page **React.js** website for a home baker using a glassmorphism UI and **React Router** for smooth navigation and dynamic product routing.
- Implemented responsive layouts and deployed the application via **Netlify** and **GitHub** to handle continuous integration and automatic updates.

Devotol - AI Developer Assistant | *JavaScript, Gemini 2.0 Flash, Netlify*

[Live Site](#)

- Built a lightweight AI assistant using **JavaScript** with a bloat free, minimal architecture to ensure fast load times and quick responses for coding prompts.
- Developed a serverless backend layer using **Netlify Functions** to securely integrate and manage requests to the **Google Gemini 2.0 Flash** model.

Volunteering

Gaza Relief Fundraising Campaign

Team Co-Lead

- Co-led a team of 5 students to execute a fundraising campaign for Civics and Community Engagement, successfully raising over **350,000 PKR** through community outreach and donation drives.