Wajahat Hassan

Python / Flask Developer - Junior Backend & RAG Prototypes

Taxila, Pakistan | wajahat.hassan.2106@gmail.com | github.com/wajjahathassan | wajahat2106hassan.pythonanywhere.com

OBJECTIVE

I am an engineer transitioning to software development. I have hands-on experience building deployable Python/Flask web apps, and an end-to-end RAG prototype. I am seeking MS/RA or junior backend roles (Asan / nearby cities preferred) where I can contribute practical web-backend and applied-ML work while growing in research and production engineering.

KEY SKILLS

- **Languages:** Python, SQL, JavaScript (vanilla).
- **Web & Back-end:** Flask, Jinja2, REST API design, JSON endpoints.
- **ML / LLMs:** sentence-transformers (all-MiniLM), FAISS, prompt engineering, Google Generative AI (Gemini).
- **Data & tooling:** pandas, numpy, SQLite, basic Git.
- **Front-end:** HTML5, CSS3, DOM Manipulation, Fetch (AJAX).
- **Engineering:** OOP, modular design, README/documentation, deployment to PythonAnywhere.

SELECTED PROJECTS

The Shrine | RAG-enabled Flask app

- **Built an end-to-end retrieval-augmented Q&A prototype:** embedding generation (sentence-transformers), FAISS index, context retrieval, prompt orchestration and generation via Google Gemini, and a chat UI on Flask.
- **Demonstrates retrieval → prompt → generation flow;** includes /ask JSON endpoint and a non-blocking UX (typewriter effect).
- **Repo + README + demo:** The Shrine Repo / The Shrine Live Demo

Portfolio Gallery | Data-driven Flask portfolio

- Constructed a Flask web gallery that loads project metadata from CSV via pandas and renders multi-media entries.
- Added a client-side estimator widget and responsive layout.
- **Repo + README:** Portfolio Gallery + Estimator Widget Repo

EXPERIENCE

Independent Developer

- Personal projects & demos (Flask, RAG, deployments).
- Maintained code, READMEs and live demos to show reproducible proof of work.

3D Artist & Freelance Designer

- Prior freelance experience producing client deliverables (logos, posters, animation assets), client communication and delivery management.

EDUCATION

- **HITEC University | Taxila, Pakistan** *Master of Science in Electrical Engineering* | December 2021 (Master's thesis details available on request.)
- **COMSATS University Islamabad | Wah Campus, Pakistan** *Bachelor of Science in Electrical Engineering* | July 2018

AVAILABILITY & LINKS

- **Seeking:** MS/RA positions or junior backend roles (open to remote / relocation to Korea).
- **GitHub:** https://github.com/wajjahathassan/The-Shrine
- **Live demo:** https://wajahat2106hassan.pythonanywhere.com

SHORT NOTE

- References, project walkthroughs, and further technical notes available upon request.
- I can provide a short video (30-45s) showing the RAG demo in action - useful for quick review.