

Arman Ashraf

Backend AI Engineer

portfolio | armanashraf015@gmail.com

LinkedIn | GitHub

+92 3021636805



Summary

Highly motivated **Backend API Engineer and Agentic AI Developer** with strong expertise in **Python, FastAPI, asynchronous systems, and AI-driven agent workflows**. Skilled in building **scalable APIs, multi-agent pipelines, visual search solutions and RAG systems**. Experienced in delivering **end-to-end AI platforms** including video generation, conversational AI, and intelligent e-commerce systems. Passionate about **autonomous systems, generative AI, and production-grade AI solutions**.

</> Technical Skills

Programming

Python

Frameworks:

FastAPI, Next.js, Reactj, TailwindCSS

AI & ML

OpenAI Agents SDK, RAG system, Visual search,TTS, AI Image Generation

Databases

SQLModel, PostgreSQL

Other:

CI/CD, Prompt Engineering, REST APIs

Tools

Docker, Git, SQLModel, Pydantic



Professional Experience

Full-stack AI-Powered Developer

Self-Employed(01/2025 – present)

- Led backend API development (FastAPI) for product catalog, cart, checkout, and order tracking, and built secure authentication & authorization workflows for customers and admins.
- Integrated an AI-powered chatbot using the OpenAI Agents SDK with RAG support for company documents and product FAQs.
- Designed and implemented a visual search pipeline using CLIP for image embeddings and Pinecone for vector similarity search.
- Deployed the platform using Docker and managed CI/CD workflows to Vercel and Hugging Face Spaces.

Tech: FastAPI, Python, Next.js, Tailwind, Docker, CLIP, Pinecone, SQLModel

AI Developer & Project Founder — SnuggleFable

Self-Employed(01/2025 – present)

- Designed and implemented an end-to-end agentic AI platform that converts a simple story theme into a ready-to-publish vertical video (YouTube Shorts).
- Built a modular multi-agent pipeline using the OpenAI Agents SDK: Story Agent, Image Prompt Agent, Sound Design Agent, Voice Module, and Final Composer.
- Implemented image generation, TTS, and video composition modules, orchestrated with asynchronous pipelines for concurrent asset generation.
- Applied advanced prompt engineering

Tech: Python, FastAPI, OpenAI Agents SDK, Docker, TTS, MoviePy, ffmpeg, Next.js (frontend)

Full-Stack Developer

Self-Employed(01/2023 – present)

- Used HTML, CSS, JS, and React for UI.
- Integrated jQuery, Bootstrap, and Material UI.
- Mastering React Hooks for state management.
- Expert in functional components
- Python, FastAPI, Next.js, and Tailwind CSS.



Projects

AI-Powered E-Commerce Application

Backend APIs with AI chatbot, RAG, and visual search.



Certificates

- Meta Front-End Specialization Developer [↗](#)
- Python for Everybody Specialization [↗](#)
- Generative AI for Everyone [↗](#)
- Mathematics for Machine Learning [↗](#)
- Computational problem solving. [↗](#)



Courses

Agentic AI Engineer

Presidential Initiative for Artificial Intelligence & Computing

AI Robotics Training

NAVTTC Pakistan (Government of Pakistan)



Awards

Awards and Recognition: [↗](#)

- Medal for dedication to academics
- Certificate for outstanding performance and exceptional character.



Soft Skills

Communication | Creativity |
Problem-Solving |
Critical Thinking |
Time Management



Languages

Urdu | English

Agentic AI Video Generator [↗](#)

Full-stack agent-driven workflow

AI-Powered Photo Editing Companion [↗](#)

Built an AI-Powered photo editing platform.

E-Commerce UI Design Project: [↗](#)

Intuitive UI for Modern Shopping.

Weather App Project: [↗](#)

Real-time Weather Information at Your Fingertips.



Education

BS MATHEMATICS

University of Gujrat [↗](#)

09/2018 – 11/2022 | Sialkot, Pakistan

CGPA: 3.74 / 4.0— Silver Medal Winner

- Advanced algorithms for precise problem-solving.
- Math-driven coding proficiency.
- Expert in logical, systematic solutions.
- Application of advanced problem-solving concepts.
- Innovative solutions through mathematical insights.



Interests

Passionate Goal:

Dedicated to becoming an AI engineer and proficient programmer.

Continuous Learning:

Committed to ongoing study and skill development in the field.

Innovative Problem Solver:

Driven to find creative solutions, leveraging AI and programming skills.