VAIBHAV SRIVASTAVA

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Professional Summary

Python Developer with 3+ years of experience building scalable backend systems, cloud-native apps, and generative AI solutions using Python, FastAPI, and AWS. Skilled in microservices, RAG pipelines, and vector databases. Improved system performance by 30–60% through optimized deployments, automation, and LLM integration, delivering measurable impact for enterprise clients.

Skills:

Backend: Python, FastAPI, Flask, Django, SQLAlchemy, JavaScript, REST APIs, gRPC, Microservices, OOP, Async programming,
AI/Gen-AI Skills: LangChain, OpenAI (GPT 3.5/4), LLaMA-2, HuggingFace, Prompt Engineering, RAG, Agentic AI,
Databases: ChromaDB, PGVector, FAISS, SentenceTransformers, PostgreSQL, MySQL, MongoDB,
Cloud & DevOps: Redis (Caching), AWS (Lambda, EC2, RDS, S3), Docker, GitHub Actions (CI/CD), Serverless,
Frontend & Integration: React.js (Basic), Streamlit, Third-party APIs, Tmux, Vim, System Design, DSA, WebSockets, Selenium, OCR/NLP

Work Experience

Facts Online | Software Developer
May 2023 - Present

- Developed and deployed **generative AI** solutions using FastAPI and LangChain, reducing API latency by 40% through **Redis caching** and intelligent automation
- Architected **microservice architecture** handling 600+ RPM for financial platform, implementing **agentic AI workflows** to automate complex business processes
- Collaborated with frontend teams to integrate ReactJS dashboards, enabling real-time analytics for 50K+ users.
- Led **production deployments** with zero-downtime using Docker + AWS, maintaining 99.9% uptime SLA.
- Developed 8+ modular **REST APIs** (FastAPI/Flask) with OOP principles, reducing code redundancy by 35%.

Research & Analytics Solutions | Python Developer
Nov 2022 - Apr 2023

- Built scalable **web scraping** pipelines using **Selenium WebDriver** to extract data from dynamic, JavaScript-heavy sites with login and **pagination**.
- Processed and transformed large datasets using **Pandas**, **NumPy**, and **regex**, storing results in **PostgreSQL/MongoDB** for real-time analytics and reporting.

Projects

Intech DC Chatbot Assistant – Enterprise AI Knowledge Retrieval
Feb 2025 - Present

- Developed and deployed **generative AI** solution using LangChain, and OpenAI models, enabling users to query personal and business documents through enterprise-grade knowledge retrieval
- Architected and **optimized RAG pipelines** with OpenAI embeddings and **Chroma vector database** to support accurate, context-aware question answering for unstructured data
- Integrated custom **agent tools** using **LangChain's** agentic capabilities to automate complex business processes including calculation, summarization, and web search

My AI Twin – AI-Powered Professional Representative & Networking Agent
Jul 2024 - Sep 2025

- Developed full-stack **agentic AI application** using Python, FastAPI, and **LangChain**, reducing response latency by 40% with async processing
- Automated lead capture via Pushover API, ensuring 100% follow-up and cutting response time to under 5 Mins.
- Designed modular **JSON-based tool calling system**, reducing feature development time by 30% and enabling seamless deployment on **Hugging Face Spaces**

Certifications

- AWS Cloud technical Essentials (Coursera)
- AI For All : From Basic To GenAI (NVIDIA)

Education

GLA University, Mathura
July 2017 - May 2021

Bachelor of Technology in Civil Engineering Mathura, UP, India

- Relevant coursework: Data Structures, Algorithms (self-taught)

Key Projects & Contributions

Zonal Excellence System – Employee KPI Analytics Platform
Built an API-driven platform to display zone-wise and employee-wise performance metrics with ranking filters.
- **Tech Stack:** Python, FastAPI, Linux, Docker, REST APIs, PostgreSQL, LDAP Authentication, ORM
- **Achievement:** Enabled business teams to access real-time KPI insights, reducing reporting delays by 80%.

Unified Health Check – Real-Time Server Monitoring
Developed a modular backend to monitor Vodafone Idea's nationwide servers in real-time with API-driven health reports.
- **Tech Stack:** Python, FastAPI, PostgreSQL, Linux, Docker, REST APIs, React.js
- **Achievement:** Reduced server downtime detection time by 60%, improving operational efficiency across 22 telecom circles.

Radio Sub Network (RSN) Automation
Built an automation system to manage RSN configurations and workflows, minimizing manual intervention.
- **Tech Stack:** Python, FastAPI, PostgreSQL, Linux, REST APIs
- **Achievement:** Cut RSN configuration time from hours to minutes, saving 100+ man-hours monthly.

FinTrackPro – AI-Powered Loan Management Platform
Engineered a scalable fintech backend with integrated payment processing and automated loan workflows.
- **Tech Stack:** Flask, React.js, SQLAlchemy, AWS (EC2, RDS, Lambda), Docker, Razorpay API
- **Achievement:** Reduced deployment time by 50% and optimized PostgreSQL queries to cut report generation time by 30% for 1000+ loan records

Ed-Tech-AI – Intelligent Quiz Generation & Learning Analytics Platform
Developed an AI-powered platform to auto-generate personalized quizzes and track learner performance through intelligent analytics.
- **Tech Stack:** Python, GPT-3.5, FastAPI, Tesseract OCR, NLP, PostgreSQL, Redis, REST APIs
- **Achievement:** Generated 1,000+ adaptive quizzes with GPT-3.5, boosting learner engagement by 85%. Achieved 70% noise reduction in text extraction via custom OCR+NLP pipeline and delivered 95% accuracy in real-time performance tracking.

Automated Web Scraping & Data Extraction
Created Selenium-based scrapers handling authentication, pagination, and dynamic JavaScript content.
- **Tech Stack:** Python, Selenium, PostgreSQL
- **Achievement:** Automated data collection from 20+ sources, reducing manual data entry efforts by 90%.

IPTV Live Streaming Platform – Razorpay Integration
Developing a live streaming platform for cable providers to deliver channel packages similar to Zee/Star networks.
- **Tech Stack:** Python, Django, Razorpay API, PostgreSQL, Asynchronous
- **Achievement:** Implemented secure online payment gateway via Razorpay, enabling seamless subscription purchases and real-time payment status updates.

Network Monitoring System – Real-Time Device & Port Status
Developing an asynchronous system to monitor device and port status via SNMP and ping, with real-time updates using PostgreSQL triggers and listeners.
- **Tech Stack:** Python, Asyncio, SNMP, PostgreSQL, DSA, System Design, FastAPI Websocket
- **Achievement:** Designed scalable architecture enabling instant device status updates for a dynamic monitoring dashboard.