

# Muhammad Hammad Asif

Senior AI & Python Backend Engineer

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Portfolio | GitHub | LinkedIn

Vetted Top 3% Engineer via Toptal | Contract-ready via Deel

## Professional Summary

Senior AI and Python Backend Engineer with 5+ years of experience architecting production-grade AI systems, advanced RAG pipelines, and scalable cloud architectures. Vetted into the top 3% of global engineering talent through Toptal. Proven expertise in scaling AI features for Shopify SaaS, training Google's Gemini models (via Turing), and engineering distributed ML pipelines. Holds an MS in Data Science with a peer-reviewed publication in NLP.

## Technical Skills

**AI & LLM Engineering:** LangChain, OpenAI/Gemini APIs, RAG Pipelines, Semantic Chunking, Prompt Engineering, SFT, RLHF.

**Backend Engineering:** Python (FastAPI, Flask), Asynchronous Programming, RESTful APIs, Microservices, Playwright/Selenium.

**Cloud & DevOps:** AWS (EC2, S3), GCP (Document AI, OCR), Ray Cluster Autoscaling, Docker, Nginx, CI/CD, Git.

**Databases & Tools:** PostgreSQL, MySQL, MongoDB, Redis, Supabase, Airtable API, Scikit-learn, Pandas, NumPy.

## Professional Experience

**Toptal** Feb 2026 – Present  
*Senior AI & Backend Engineer (Remote)* Global

- Vetted into elite network of global freelance engineers (Top 3% screening process).
- Engaged in high-scale AI integration and Python backend infrastructure for international enterprise clients.

**Scanify Dev** Jul 2025 – Nov 2025  
*AI Backend Contractor (Remote)* Contract Concluded

- Architected and scaled asynchronous OpenAI API pipelines for a production-level Shopify SaaS platform.
- Optimized FastAPI backend endpoints, reducing production latency and eliminating critical system bottlenecks.

**Turing.com (Google Gemini Project)** Apr 2024 – May 2025  
*AI Training Engineer (Remote)* Contract Concluded

- Collaborated with Google-commissioned teams to enhance Gemini's data analytics and logical reasoning.
- Engineered high-quality SFT datasets and performed RLHF annotations to maximize model accuracy.

**Zaytrics (Pvt.) Limited** Jan 2021 – Jun 2023  
*Lead AI System Developer* Islamabad, Pakistan

- TenderML:** Independently built and deployed an AI classification pipeline for German construction PDFs (95% accuracy).
- Orchestrated AWS EC2 hosting using **Ray clusters** for automated horizontal scaling of distributed Python workloads.
- GCP InsightDocs:** Designed a cloud data extraction engine using GCP Document AI and OCR as a high-throughput REST API.

## Selected Projects

Portfolio Scraper & AI Job Score Matcher

Python, FastAPI, LangChain, Playwright, Docker

- Developed an asynchronous FastAPI microservice that extracts multi-format developer portfolios and cross-references them against active enterprise job descriptions.
- Integrated LangChain AI models to deliver contextual fit analysis, automated candidate scoring, and dynamically rendered HTML reports.

### Real-time E-commerce Price Comparison Engine

*Python, Selenium, BeautifulSoup, API Integration*

- Built a high-throughput data scraping engine that concurrently aggregates live product listings and variant prices across Amazon, eBay, and regional e-commerce platforms.
- Optimized scraping loops and error handling to handle anti-bot frameworks, delivering unified real-time pricing data streams.

### FoodScanSaaS Mobile Application Backend

*Python, ChatGPT API, NLP, SaaS Architecture*

- Engineered a scalable backend system that processes scanned barcode data and queries the ChatGPT API to return instant ingredient analysis and natural language dietary insights.

### Order Tracking Web Scraping System

*Python, Web Scraping, Airtable API, Asyncio*

- Designed a centralized tracking engine that extracts real-time shipment updates across multiple global shipping couriers using a single tracking ID, feeding data straight into an Airtable enterprise backend.

## Publications

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### Comparative Evaluation of Text Similarity Metrics for Enhanced Abstractive Summarization on CNN/DailyMail Corpus

*Journal of Computational Biology and Informatics (JCBI), 2023*

Conducted rigorous empirical research evaluating syntactic, semantic, and hybrid text similarity algorithms. Demonstrated measurable improvements in factual accuracy and coherence by embedding optimized metrics into abstractive deep learning models.

*Keywords: Text Similarity Metrics, Abstractive Summarization, NLP, Deep Learning, ROUGE.*

## Education

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### MS in Data Science

Air University, Islamabad, Pakistan

2020 – 2023

*Specialization: NLP & Machine Learning Metrics*

### BS in Computer Science

Air University, Multan, Pakistan

2016 – 2020

*Capstone: LSTM-based Hybrid Text Summarization Engine*

## Key Highlights & Remote Availability

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- **Global Vetted Status:** Vetted into the top 3% of worldwide engineering talent via Toptal; trusted by Turing to train Google's flagship Gemini models.
- **Production Autonomy:** Proven track record of taking complex systems from absolute scratch to production deployment (e.g., TenderML, GCP InsightDocs).
- **Frictionless Collaboration:** Async-first communicator utilizing Slack, Jira, and Loom to align perfectly with US, UK, and European teams.
- **Availability:** Immediate availability for full-time remote roles. Contract-ready and easily onboarded globally via Deel.