

Ehtesham Hassan

ASSOCIATE SOFTWARE ENGINEER

Ehteshamhassan1@gmail.com · +92 309 1633891 · [Portfolio](#) · [GitHub](#) · [LinkedIn](#)

SUMMARY

I'm a backend engineer building production Python services on AWS. At Ginkgo Retail I work across two products: a review syndication platform that pushes merchant reviews to Walmart, Best Buy and Target, and a marketing analytics dashboard for ad spend and attribution. I write the Django REST Framework and FastAPI services behind both, plus the integrations, webhook ingestion and Celery jobs they run on, and I build part of the data pipeline the dashboard reads from.

EXPERIENCE

Associate Software Engineer

Ginkgo Retail

Dec 2025 – Present

Lahore, Pakistan

Review Syndication Platform · *syndicates merchant reviews to Walmart, Best Buy, Target and other US retailers*

- Build the Django REST Framework and FastAPI services behind review collection, moderation and syndication, for merchants selling across several retailer channels at once.
- Pull orders, products and customers from merchant stores through Shopify's REST and GraphQL APIs, handling pagination, rate limits, retries and per-store credentials, plus a full backfill when a new store connects.
- Ingest Shopify webhooks in real time with signature verification and idempotency checks, so a retried delivery never creates a duplicate review or order.
- Move syncs, backfills and retailer feed submissions off the request path onto Celery workers, with Celery Beat and cron driving everything that runs on a schedule.

Marketing Analytics Dashboard · *Meta and Google ad spend, revenue, orders and pixel attribution in one view*

- Build the APIs that serve ad spend, revenue, order and customer data to the dashboard, and push live updates to the browser over WebSockets using Django Channels.
- Build parts of the pipeline behind it: roughly 50,000 tracking-pixel events a day into ClickHouse, a columnar analytics database, modelled as a star schema with materialized views that took dashboard queries from about 5 seconds to under 1.
- Deploy both products as Docker containers on EC2, with S3 storage and per-service IAM, VPC and security groups.

Python Developer Intern

Selteq Solutions

Aug 2025 – Dec 2025

Lahore, Pakistan

- Built the backend for an inventory management system in Django and Django REST Framework, covering the full lifecycle for stock, suppliers and purchase orders.
- Added JWT authentication and role-based access control so warehouse staff, managers and admins each reached only the operations their role allowed.

PROJECTS

Async API Gateway & Rate Limiter — *FastAPI, Redis, asyncio*

Feb 2026

- Asynchronous API gateway and reverse proxy that keeps downstream services stable when traffic spikes.
- Redis-backed sliding-window rate limiter enforcing per-client request limits, accurate at window boundaries and cheap enough to run on every request.

API Gateway Control Plane — *Django, Redis*

Jan 2026

- Django admin interface for the gateway's routing rules, synced to Redis in real time so a route change takes effect immediately with no redeploy.

TECHNICAL SKILLS

Languages	Python, SQL, C/C++
Backend	Django, Django REST Framework, FastAPI, Celery & Celery Beat, Django Channels (WebSockets), Webhooks, REST & GraphQL APIs, JWT & RBAC
Integrations	Shopify REST & GraphQL, retailer syndication feeds, Meta & Google Ads data, tracking pixels
AWS	EC2, S3, IAM, VPC & Security Groups, Docker on EC2
Data & Queues	ClickHouse, PostgreSQL, MySQL, Redis, Apache Airflow, Kafka
Fundamentals & Tools	OOP, Data Structures & Algorithms, System Design, Docker, Git, Postman, Linux

EDUCATION

National University of Computer and Emerging Sciences (FAST NUCES) — BS in Data Science · CGPA 3.0 / 4.0

Sep 2021 – May 2025

Forman Christian College — FSc, Pre-Engineering

Aug 2019 – Mar 2021