MUHAMMED YUSUF

SENIOR SOFTWARE ENGINEER

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PROFESSIONAL SUMMARY

Senior Software Engineer with 5+ years of experience building systems across finance, data, and AI using Python, Django, FastAPI, Flask, Kotlin, and Ktor. Built a conversational AI engine supporting 1,000 concurrent conversations and led a team of three to deliver financial and market data APIs and a business intelligence suite to production.

KEY SKILLS

- ✓ **Languages & backend:** Python, Kotlin; FastAPI, Django, Flask, REST APIs, AsyncIO, WebSockets
- ✓ **Data & infrastructure:** PostgreSQL, MySQL, Redis, RabbitMQ, Docker, AWS
- ✓ **Systems & security:** Multi-tenant systems, OAuth2/OIDC, RBAC/ABAC, Payments, Real-time AI

PROFESSIONAL EXPERIENCE

Backend Systems Engineer | Mango Zest Labs

Jun 2024 - Present

- Designed and built an end-to-end conversational AI engine for virtual call centers, supporting up to 1,000 concurrent conversations with sub-second latency.
- Built the voice pipeline and voice activity detection which allows barge-in, letting callers speak naturally during conversations with an AI agent.
- Integrated SIP/Asterisk telephony with the AI engine so customers could make and receive AI-assisted phone calls.
- Built the backend for a virtual call center platform that enables businesses to publish context-aware AI customer support assistants and run calling campaigns with no internal system integrations required.

Lead Backend Engineer | Data Quotient

Jan 2025 - Feb 2026 (part-time)

- Led backend engineering in a team of 3 for DataBrew, Leveller and the Developer Portal, a connected suite spanning financial data APIs, business intelligence and developer service management.
- Led the engineering of DataBrew APIs and ingestion pipelines that organized fragmented Nigerian market, financial, and government data into consistent, usable datasets; with response time load-tested to under 70 ms.
- Built Cudify, a multi-currency wallet and payments backend in Kotlin supporting NGN, KES, GHS, USD and EUR, with an append-only financial ledger, atomic transactions, and two provider integrations for cross-border transfers.
- Designed and developed a Developer Portal where customers manage product credentials, access permissions, subscriptions, and usage-based credits from one place.
- Implemented tenant data isolation and tested authentication, tenant boundaries, and financial ledger operations before rollout.

Backend Developer | Fagmaz Hydra Ventures

Jan 2021 - May 2024

- Built a farm inventory system using Flask and MySQL, reducing stock tracking from four hours of manual work to under 15 minutes.
- Automated daily reports and built an admin portal maintained in Django which made routine data management easier for operations staff.

SELECTED PROJECTS

DealForte / HexShare | Secure document-sharing SaaS and open-source platform

dealforte.space | github.com/Merrick1307/HexShare

- Built and launched a secure document-sharing platform with named recipients, email-verified access, revocable links, individual watermarks, and viewer activity tracking.
- Turned the open-source platform into a hosted product, adding billing and managing production deployment (FastAPI, PostgreSQL, Docker, AWS).

Hexalgon IAM | Multi-tenant identity & access management

github.com/Merrick1307/identity-access-management-system

- Built access management with PostgreSQL Row-Level Security to prevent one organization from accessing another organization's data.
- Added O(1) permission checks using JWT-embedded policies, plus Redis-backed token revocation across workers.

EDUCATION

B.Sc. Computer Science | Osun State University