

Obed Osei Frimpong

Forward Deployed AI Engineer · Fintech & Finance Operations

Abu Dhabi, UAE | oseifrimpong.com | [Contact form](#) | linkedin.com/in/oseifrimpong | github.com/oseifrimpong

Forward deployed AI engineer with 10+ years building production backend and fintech systems. I embed with teams to take LLM and agent systems from demo to production in workflows where mistakes cost money, with evals, guardrails, human review and a full audit trail. Currently building fintech integrations with UAE central-bank and government systems, and architecting an auditable AI reconciliation platform for Gulf finance teams.

CORE EXPERTISE

AI systems	LLM applications, AI agents & orchestration, RAG, AI data pipelines, evals & regression testing, guardrails, human-in-the-loop design, OWASP Top 10 for LLM Apps
Architecture	Microservices, domain-driven design, event-driven systems, gRPC & REST APIs, multi-tenant SaaS (Postgres row-level security), modular monoliths
Languages	Go, Python (FastAPI, Pydantic), Java (Spring, Hibernate), TypeScript / Node, React
Data & cloud	PostgreSQL, MySQL, Redis, MongoDB · Azure (UAE North, AI Foundry, Document Intelligence), AWS, Kubernetes, Docker, Jenkins
Domains	Fintech & payments, finance operations & reconciliation, UAE regulation, retail & e-commerce, supply chain, blockchain
Spoken	English (fluent), Chinese (intermediate)

SELECTED AI WORK

- Founder & Architect, Tasweya** · AI reconciliation & month-end close for Gulf multi-entity groups 2026 – present
- Architected an auditable **“LLM as adjudicator”** pattern: a deterministic, I/O-free matching engine generates candidates, and the model only chooses among them under a strict JSON schema. A deterministic-only mode runs with zero model calls.
 - Designed mandatory provenance (a canonical financial event linked to immutable, content-addressed source files) and an append-only decision log so every automated decision is explainable to auditors.
 - Multi-tenant isolation with Postgres row-level security, UAE data residency on Azure UAE North, and bilingual Arabic/English, RTL-first UX.
 - Mapped the architecture to the OWASP Top 10 for LLM Apps (2025) and the web Top 10. Set an eval gate of ≥85% deterministic auto-match on real anonymised data before MVP.
- Builder, SmartComply Digest** · smartcomply.ae 2026
- Weekly, source-linked digest translating UAE regulatory changes (tax, AML, labour, financial services, free zones) into plain language.

PROFESSIONAL EXPERIENCE

- Senior Software Engineer, AstraTech** · Abu Dhabi, UAE · fintech 09/2024 – present
- Architect and build major features integrating with the Central Bank of the UAE and other government systems.
 - Lead system design and architecture decisions for core fintech services.
 - Redesigned legacy services for performance, reducing production errors by 20%, and enhance the services powering internal analytics dashboards.
- Senior Software Engineer, Decathlon** · Shanghai, China · global retail 08/2018 – 09/2024
- Built a high-availability messaging middleware handling **2,000 transactions/sec**, with Go and Java microservices for filtering, processing and logging before dispatch.
 - Designed and built a self-checkout WeChat mini-program, cutting store checkout wait times from **30 to 2 minutes**.
 - Migrated product infrastructure from VM-based Docker to Kubernetes, cutting deploy time from **30 to 10 minutes**.
 - Back-end engineer on global product development, managing 1,000+ production moulds and assets. Built a React dashboard for message templates and tracking.
 - Led the internal software architecture community and mentored junior engineers.
- Full-stack Engineer (AI product), DateMate AI** · freelance 04/2023 – 02/2024
- Integrated LangChain-powered LLM features into a production consumer app. Contributed to system and data-model design.
 - Built UI components wired to backend APIs, and set up CI/CD pipelines deploying to AWS EC2.
- Earlier roles** 2011 – 2018
- CTO / System Engineer, NUSIC** (Shanghai & Shenzhen, 2018): built the NUSIC blockchain on Hyperledger Fabric and managed a 6-person team
 - IT Team Lead / PM, Preston Capital Holding Group** (Shenzhen, 2017–18)
 - Software Engineering Instructor, IPMC** (Accra, 2011–13): taught C/C++, Java, the SDLC and project management

EDUCATION & CERTIFICATIONS

B.Eng. Computer Science, South China University of Technology (2017) · Advanced Certificate in Software Engineering, IPMC Institute of Technology, Ghana (2011) · Certified ScrumMaster (CSM), Scrum Alliance

Open to select side engagements: AI production readiness reviews · agent pilot sprints · fractional AI architecture. Details at oseifrimpong.com.