

Faith Popoola

steelmaxima21@gmail.com • github.com/Maxima24 • Lagos, Nigeria

Backend Engineer specializing in scalable NestJS systems for e-commerce, payments, and real-time fulfillment. Built production food-delivery platform handling orders, vendors, commissions, and instant delivery tracking. Expert in event-driven architecture (BullMQ), payment gateway integration (Paystack, Squadco), subscription models, and multi-vendor infrastructure. Full-Stack Lead at PortalHq shipping TypeScript across frontend and backend. Rapid builder comfortable shipping production features in startup environments.

SKILLS

Languages: TypeScript • JavaScript • Python • SQL

Backend: NestJS • Node.js • Express • REST APIs • WebSockets • BullMQ • JWT Auth • Zod

Payments & E-commerce: Paystack • Squadco • Order State Machine • Subscriptions • Commission Models • Real-time Fulfillment

Frontend: React • Next.js • Tailwind CSS • TanStack Query • Zustand

Databases & AI: PostgreSQL • Redis • Prisma • pgvector • Sentence Transformers • RAG Pipelines

DevOps & Cloud: AWS EC2 • Nginx • SSL/TLS • Docker • Railway • Firebase • GitHub

PROFESSIONAL EXPERIENCE

Frontend Lead, PortalHq | Remote | Aug 2024 – Present

- Lead frontend architecture, enforce TypeScript best practices, component patterns, and performance standards across the product.
- Collaborate with backend engineers in agile ceremonies; ship full-stack features end-to-end in sprint cycles.
- Implemented real-time UI with WebSockets, TanStack Query, Zustand—eliminated unnecessary re-renders and improved perceived performance.

KEY PROJECTS

QuickByte — Food Delivery Platform | *NestJS, PostgreSQL, Redis, BullMQ, FCM, Socket.IO, Paystack, Railway*

- Architected modular NestJS backend with layered services handling complete order lifecycle (creation, confirmation, preparation, dispatch, delivery), vendor management, product catalogs, real-time delivery tracking via Socket.IO. Serves 500+ active monthly orders.
- Built production payment infrastructure: Paystack REST API integration with async webhook handling, automatic 10% commission splitting via event-driven VendorPayout processor using BullMQ cron jobs, internal prepaid wallet system, and settlement reconciliation.
- Engineered BullMQ FCM push notification pipeline: device token storage in PostgreSQL, targeted notifications by order status, exponential backoff retry logic, Firebase Admin SDK integration for 100+ concurrent notifications.
- Designed async vendor availability scheduler computing real-time open/closed status from weekly schedules; stale order escalation logic with tiered BullMQ nudges and fault attribution.
- Implemented global Winston logging system with HTTP request middleware and global exception filter for full observability across API.
- Group ordering with BullMQ cutoff processor; Cloudflare R2 image uploads for menus and products; role-based access control for vendors/admins.
- Containerized with Docker and deployed to Railway with environment-aware Prisma migrations and Supabase PostgreSQL production database.
- Registered as Private Limited Company (CAC) in Nigeria; Flutter mobile app handled by separate developer.

NESG Semantic Search Engine | *NestJS, PostgreSQL, pgvector, BullMQ, Sentence Transformers, Railway*

- Architected fully offline semantic search engine using pgvector and all-MiniLM-L6-v2 Sentence Transformers—zero external LLM API calls, 384-dim embeddings.
- Engineered BullMQ document ingestion pipeline: automatic chunking, embedding generation, vector storage into PostgreSQL for cosine-similarity search at scale.
- Implemented Redis caching with intelligent invalidation; EventEmitter2 analytics tracking search queries and retrieval performance.

- Deployed end-to-end on Railway: NestJS API handling embedding generation and vector retrieval in single request cycle.

TapPay — NFC Points Transfer App | *NestJS, React, Web NFC API, Socket.IO, Squadco, PostgreSQL, Prisma*

- Built hackathon P2P NFC points transfer app with real-time bidirectional Socket.IO communication between phones for instant settlement.
- Integrated Squadco payment APIs: Virtual Account creation, transaction initiation, SMS verification, static virtual wallet management.
- Implemented Web NFC API for tap-to-send peer transfers; Prisma ORM for transaction ledger integrity and audit trail.

LearnHub — LMS Platform | *Next.js, NestJS, WebSocket, TypeScript, TanStack Query, Zustand, Cloudflare R2*

- Full-stack LMS: video playback with persistent progress tracking via Zustand, real-time notifications over WebSocket, course summaries via Cloudflare Workers AI.
- Engineered Next.js App Router with SSR for fast initial loads; TanStack Query for data fetching, Zustand for global state with localStorage persistence.
- Built video upload pipeline to Cloudinary/R2; share and download features. Fixed production Next.js routing bugs in dynamic params and port config.

HNG Internship & Real-Estate Booking Platform | *AWS EC2, Nginx, SSL/TLS, PostgreSQL, Paystack, React, Node.js*

- Provisioned and hardened AWS EC2 Ubuntu instance: Nginx reverse proxy, SSL via Certbot, UFW firewall rules, SSH key-only authentication. Deployed HTTPS endpoint used by 100+ interns.
- Developed property rental platform managing 50+ listings: PostgreSQL availability tracking, Paystack payment gateway (99.9% success rate), role-based access control for owners/renters.

GhostShield — AI Payroll Fraud Prevention | *Next.js, NestJS, Python FastAPI, Squadco, Ensemble ML*

- Built hackathon fraud detection platform analyzing payroll transactions for anomalies.
- Engineered ensemble ML model (Isolation Forest + LSTM) with DeepFace facial recognition and LayoutLMv3 document analysis.
- Integrated Squadco payment APIs for real-time transaction verification and settlement confirmation.

SynthSentry — Portfolio Risk Management (OAU x Bayse Hackathon) | *Next.js 14, NestJS, PostgreSQL, Prisma, Redis, BullMQ, Gemini API, Bayse API*

- Built AI-powered portfolio risk management platform with predictive market analysis.
- Full Bayse prediction markets API integration: rewritten from scratch after discovering platform use case.
- Integrated Gemini API for portfolio recommendations; Redis/BullMQ for background risk analysis jobs. Generated pitch deck via pptxgenjs.

SceneIQ — Real-time Computer Vision Security Intelligence | *Python YOLOv8, ByteTrack, NestJS, Socket.IO, BullMQ, pgvector, Cloudflare R2*

- Designed real-time computer vision platform for security intelligence and threat detection.
- Built Python CV microservice (YOLOv8 + ByteTrack for object detection and tracking); NestJS backend pipeline for frame processing.
- Integrated pgvector for embedding storage; Socket.IO for live video feed and alerts; BullMQ for background frame analysis jobs.

OAU Software Engineering Department Website | *Next.js 14, NestJS, PostgreSQL, Prisma, JWT RBAC, Cloudflare R2, GSAP*

- Developed official department website with event management, course catalog, and staff directory.
- Implemented JWT-based role-based access control (RBAC); Cloudflare R2 for image/document storage. Navy/gold OAU color scheme with GSAP animations.

EDUCATION

B.Eng. Computer Engineering • Obafemi Awolowo University (OAU), Ile-Ife, Nigeria | Expected 2028