Francis Oladosu Software Engineer

■ meetfran6@gmail.com

08105816441

• Lagos

10th October

github.com/HorlaRepo

Profile

Highly adaptable Senior Software Engineer with 7+ years of experience, specializing in leveraging AI tools to enhance coding productivity and build scalable systems. Expert in integrating modern AI-assisted workflows, with hands-on experience using the Claude AI suite for code generation, optimization, and documentation. Proficient in combining traditional development practices in Java, Spring Boot, and microservice architecture with rapid prototyping and deployment using AI assistants. Passionate about building robust, secure, and efficient applications while significantly accelerating development cycles.

Skills

Languages

Java, PHP, JavaScript, TypeScript, Python, Dart

Cloud & DevOps ● ● ●

AWS (EC2, RDS, S3, Elastic Beanstalk, CloudFront), Azure App Service, GCP

AI-Assisted Development

Claude AI (Opus, Sonnet), GitHub Copilot, Generative AI (GPT-4 for planning & architecture), AI-driven code generation, refinement, and optimization.

Security & Best Practices

Custom header filters, OWASP guidelines, OAuth2, JWT, HMAC, CORS, input filtering, rate limiting, PCI DSS compliance, Request signing/Verification

Architecture & Design

Microservices, RESTful APIs, Event-driven Architecture, Monolith-to-Microservice Migration

Frameworks

Springboot, Laravel, React, Angular, NextJS, FastAPI, Django

CI/CD

GitHub Actions, Kubernetes, Docker multi-stage builds, Flyway migrations

Databases

MySQL, PostgreSQL, MongoDB, Firebase

Testing

JUnit5, Mockito

Professional Experience

2023 – 2025 Lagos, Nigeria

Engineering Co-Founder/Senior Full-Stack Developer

NexHrm 🖸

- Designed and led microservices-based architecture for a scalable SaaS HR platform using Spring Boot (Payroll) and Laravel (Leave & Attendance), deployed as independent services in Docker containers orchestrated via Kubernetes.
- Implemented **inter-service communication via REST APIs**, with **centralized logging**, **API gateway**, and **config management**, ensuring loose coupling and independent scalability.
- Optimized AWS infrastructure (EC2, RDS, S3, Elastic Beanstalk, CloudFront) for high availability and cost efficiency.
- Established **DevOps pipelines** using **GitHub Actions**, **Docker multi-stage builds**, and **Kubernetes deployments** to automate CI/CD workflows.
- Strengthened security with JWT, OAuth2, custom headers, rate limiting, RBAC, and OWASP-compliant input filtering.

- Introduced key microservices patterns including **service discovery**, **circuit breaker**, and **centralized exception handling** for fault-tolerant, resilient design.
- Delivered a **white-labeling engine** supporting tenant-specific branding and configurations across services.
- Achieved **40% reduction in response time** and **25% infrastructure cost savings** through targeted performance and architecture optimizations.

05/2022 - 08/2023

Smart Contract Developer

Remote

Cryptika

- Developed and optimized smart contracts for scalable blockchain applications, ensuring high security and efficiency.
- Collaborated with cross-functional teams to deliver robust DeFi protocols and token standards across EVM-compatible chains.
- Focused on gas optimization and real-world usability, enhancing contract performance in high-throughput environments.

2019 – 2023 Lagos, Nigeria

Freelance Software Engineer

Remote

- **Delivered enterprise-grade solutions** for clients in **fintech**, **healthcare**, and **logistics**, leveraging modern backend technologies and cloud infrastructure.
- Engineered scalable, microservices-based backend systems using Java, Spring Boot, and PostgreSQL, with Dockerized services deployed on AWS and GCP.
- **Integrated complex third-party APIs**, payment gateways, and internal microservices, ensuring secure and seamless cross-platform communication.
- Prioritized performance, security, and maintainability, applying best practices such as modular service design, rate limiting, input validation, and secure authentication with JWT/OAuth2.
- Automated CI/CD pipelines and managed production deployments with GitHub Actions, Docker, and cloud-native tools, ensuring zero-downtime releases.
- Collaborated directly with stakeholders, translating business requirements into reliable, high-performance backend solutions tailored to domain-specific challenges.
- Consistently utilized AI-assisted coding tools, including Claude AI and GitHub
 Copilot, to accelerate prototyping, debug complex issues, and refactor code, boosting
 project delivery speed and efficiency.

04/2019 - 09/2021

Blockchain Developer

Remote

Quarkchain

- Optimized sharding algorithms at QuarkChain, boosting transaction throughput to over 10,000 TPS.
- Enhanced smart contract execution speed by 30% through virtual machine optimizations.
- Integrated hardware wallet support for improved user key management security.

2018 – 2019 Lagos, Nigeria

Android Developer

ConnectRails Services Ltd

- Engineered and maintained rider-facing features for a real-time parcel delivery Android app using Kotlin, Jetpack components, and MVVM architecture.
- Integrated GPS and Google Maps APIs for accurate real-time tracking, pickup/drop-off navigation, and ETA calculations, enhancing delivery precision.
- Implemented live status updates, Firebase Cloud Messaging, and push notifications to improve rider-customer communication and delivery transparency.
- Built **offline-first functionality** with **local caching** and **background location syncing** to ensure reliable delivery operations in **low-connectivity environments**.
- Consumed and synced data via **RESTful APIs**, handling task assignments, order updates, and real-time activity logging with the backend system.

- Used **Firebase** for **real-time location tracking**, **push notifications**, and **crash reporting**, improving user experience and stability.
- Optimized performance and device compatibility, ensuring stability across multiple Android versions and form factors.
- Collaborated closely with **backend engineers** and **UI/UX designers** to streamline user flows and deliver intuitive rider experiences.
- Wrote **unit tests** and employed tools like **ADB**, **Logcat**, and **Android Profiler** to ensure app robustness and simplify debugging.
- Actively participated in **agile ceremonies**—including sprint planning, feature grooming, and code reviews—to ensure timely, high-quality releases.

2016 – 2017 Lagos, Nigeria

Software Instructor & Tech Lead

Center4Tech

- Taught Android development to teenagers (ages 12–16) in summer coding camps, simplifying complex concepts using Java and Xml.
- Led a small team of junior developers to design and build a child-tracking mobile app, integrating real-time location tracking and user-friendly interfaces.
- **Established coding standards**, conducted **code reviews**, and resolved bugs to ensure code quality, maintainability, and team learning.

2015 – 2016 Ogbomosho, Nigeria

App Developer

CMap-It

- **Developed Java desktop applications** for hotel and hostel management, and a real-time chat system, using **JavaFX/Swing** and **Object-Oriented Design principles**.
- Built a rule-based medical diagnosis tool using Prolog, showcasing expertise in logic programming and AI-driven inference systems.
- Collaborated closely with clients, conducting regular feedback sessions, fixing bugs, and refining features to meet evolving requirements.

Projects

08/2025 - 09/2025

AI-Driven SAAS B2B Recruitment Platform | 2025

NexHrm Recruitment

Designed and developed a comprehensive, multi-tenant B2B recruitment system for NexHrm, engineered to streamline the entire hiring lifecycle from job posting to candidate management.

- AI-Powered Development Workflow: Leveraged a suite of AI tools to accelerate the
 development lifecycle. Utilized advanced models like GPT-40 for initial architectural
 planning and user story generation. Employed Claude 3 Sonnet for hands-on
 implementation, providing it with detailed context and tasks to generate robust and
 efficient code. Used Claude 3 Opus to create comprehensive technical specifications
 and end-user documentation.
- Advanced Recruitment Features: Implemented a dynamic recruitment pipeline with customizable stages and progress history, visualized through a Kanban-style board.
 Engineered an event-driven architecture to automatically notify candidates of their application status, enhancing communication and engagement.
- Multi-Tenant Architecture & Public Listings: Built a scalable multi-tenant system allowing each organization to manage its own job listings. Each tenant receives a unique, shareable public URL for their career page.
- **Performance & Scalability:** Ensured high-speed performance by caching large requests and implementing an efficient cache invalidation strategy. Offloaded heavy tasks like file uploads to a separate background job dispatcher to maintain application responsiveness. Implemented database indexing to accelerate query performance.

• **Security & Abuse Prevention:** Secured public endpoints with rate limiting, reCAPTCHA on application submissions, and best-practice security headers to prevent abuse and ensure system integrity.

2025 - 2025

Enterprise Payment Gateway Platform (Java, Spring Boot, PostgreSQL)

Enterprise Payment Gateway Platform | 2025

Built a secure, scalable, and multi-currency payment gateway for enterprise-level financial transactions

- Microservices Architecture: Designed a distributed system using Spring Boot 3 and Java 17, following Clean Architecture and Domain-Driven Design (DDD) with clear separation between domain, application, and presentation layers.
- Fintech-Ready Features: Supported multiple payment methods including Visa, Mastercard, ACH, and Wire Transfers, with real-time fraud detection, auditable transactions, and multi-currency handling.
- Security-First Design: Implemented JWT-based authentication, HMAC-SHA256 request signing, rate limiting, and sensitive data masking—fully aligned with OWASP and PCI DSS compliance.
- Advanced Testing Strategy: Achieved 100% test pass rate with 62 tests—unit tests via Mockito, integration tests using Testcontainers (PostgreSQL/Redis), and full end-to-end payment flow validation.
- Production-Grade Infrastructure:
- Robust API & Integrations: Exposed RESTful endpoints with OpenAPI
 documentation, full Postman collection, and integrated webhooks with HMAC
 signature verification for third-party processors.
- **Tech Stack**: Java 17, Spring Boot 3, PostgreSQL, Redis, Docker, Testcontainers, JWT, HMAC, Maven, Git

2024 - 2025

WaveSend 🛮

AI-Driven Cross-Border Financial Platform | Google Cloud Hosted
Developed WaveSend, a robust cross-border financial platform blending AI-powered
user experiences with a secure, scalable architecture to deliver seamless digital
banking and money transfer services.

AI-Driven Features

- Conversational AI Assistant: Built an interactive chatbot for instant and scheduled transfers, OTP verification flows, and real-time balance tips, enhancing user engagement.
- Smart Fund Suggestions: Engineered AI logic to identify cash-strapped beneficiaries and recommend fund transfers—triggered only when the sender has sufficient balance.

Payment Integrations

- Stripe & Flutterwave: Integrated secure deposit and withdrawal workflows with real-time status synchronization and transaction verification.
- **Idempotent Transactions**: Implemented safeguards to ensure **transaction consistency** and **eliminate race conditions**, supporting reliable financial operations.
- Scalable Infrastructure
- Cloud-Native Deployment: Hosted on Google Cloud Platform with auto-scaling and load balancing for high availability.
- **Performance Optimization**: Utilized **Redis** for caching and **Kafka** for asynchronous messaging (email alerts, notifications).
- Mark DevOps & Automation
- CI/CD Pipelines: Configured GitHub Actions for fully automated build, test, and deployment, enabling faster and safer releases.
- **Dockerized Services**: Deployed containerized microservices to simplify scaling, maintenance, and environment consistency.



- Defense in Depth: Enforced rate limiting, input filtering, and real-time fraud detection to mitigate attack vectors.
- **Identity-Based Access**: Applied **tiered transaction limits** tied to user verification levels (KYC tiers).
- AML Compliance: Integrated Anti-Money Laundering monitoring, flagging suspicious patterns and enforcing withdrawal constraints on unverified funds.

2023 − 2025 **NexHrm** 🖸

Microservices-Based HR Management Platform | AWS Hosted

Built a scalable **HR software (NexHRM)** with a **microservices architecture**, leveraging **Spring Boot** for Payroll services and **Laravel** for Leave, Attendance, Performance, Timesheet, and Reporting modules. Frontend built using **React** for a modern, responsive user interface.

Architecture & Core Features

- Microservices Design: Decoupled architecture with Spring Boot (Java) powering Payroll, and Laravel (PHP) handling HR modules such as Leave, Attendance, Performance, and Timesheets.
- Modular Development: Developed self-contained modules for employee management, leave tracking, attendance monitoring, performance evaluations, timesheets, and custom reporting.
- **Frontend**: Built with **React**, delivering fast and user-friendly experiences across all devices.

Cloud Infrastructure & Deployment

- AWS Deployment: Deployed on AWS Elastic Beanstalk, RDS (MySQL), and CloudFront for scalability, availability, and global performance.
- CI/CD & Environment Management: Used Docker and environment-based configurations to streamline deployments and manage microservice lifecycles.

Security & Best Practices

- API Security: Hardened endpoints with CORS policies, custom header filters, and input validation.
- **RBAC**: Enforced **role-based access control** across modules to protect sensitive employee data.

Testing & Code Quality

- **Unit Testing**: Wrote test cases to ensure **code quality**, reduce bugs, and support future **refactoring**.
- Collaborative Reviews: Engaged in code reviews and modular testing to ensure maintainable and scalable architecture.

2024 - 2024

Email Attachment Management Tool

- Developed a Python-based tool for a client to automate downloading and removing attachments from old emails while preserving email content.
- Implemented batch processing and connected via IMAP to efficiently handle large email volumes without overloading the server.
- Technologies: Python, IMAP

Education

2012 – 2017 Ogbomosho, Nigeria

Bachelor of Technology

Ladoke Akintola University of Technology