

Semeton Balogun

Backend and systems engineer, moving into solutions architecture

Lagos, Nigeria · balogunsemeton@gmail.com · semeton.xyz · github.com/semeton · linkedin.com/in/semetonbalogun

SUMMARY

Backend and systems engineer with six years in production: multi-tenant platforms for banks and enterprise SaaS, offline-first data for national health campaigns, and governance for AI coding agents. I start from the business goal: sizing infrastructure, designing deployments inside bank networks, and representing engineering with stakeholders. Looking for lead roles in solutions architecture, or AI research on agent governance: guardrails and repository memory for coding agents.

EXPERIENCE

Lawyering — CTO

May 2026 – present

A workspace for law firms and individual practitioners: cases, engagements, documents, billing and client communication. Sole engineer, building agent-first.

- Designed the platform as a modular monolith of 19 Laravel modules, with tenant scoping on every tenant-owned record
- Built Drive: encryption at rest, participant permissions, and share links with expiry and access codes for viewers without accounts
- Built PayTrack billing in naira and US dollars, with payment plans and automatic retainer renewals
- In production since June 2026, with over 1,200 automated tests

eGov Foundation — Hub Software Engineer, West Africa (Contract)

Jun 2026 – present

Bridge between country programme teams and platform engineering on DIGIT HCM, the open-source platform running Nigeria's national malaria campaigns.

- Diagnosed activity dates being stamped at sync time instead of on-device creation time, which locked field workers out of working days and skewed attendance-based pay; documented the root cause and fix requirement
- Contributed to the stock-reconciliation design for an ITN distribution pilot in an offline-first ledger
- Sizing infrastructure and support staffing for a 2027–29 programme across 11 states (~27M target population)

Seamless Technologies — Backend Engineer

Nov 2024 – present

Recruitment platform and HRMS modules for a multi-tenant HR suite serving enterprise clients.

- Built the Kafka pipeline to the company data lake as a non-blocking side effect, so a mapping failure can't fail the primary write
- Implemented the two-way integration between the recruitment platform and the core HRMS, including SSO with company-access checks and service-to-service auth
- Led tenant-isolation and security hardening: SSRF-safe webhooks, company-scoped reads and writes, per-client mail credentials, GDPR self-service deletion
- Backend for AI-assisted hiring: CV parsing, candidate ranking, automated screening
- Volunteer facilitator on the Codeable programme, teaching software engineering to Special Olympics athletes and students at the Kirikiri correctional centre

Zercom Systems — Technical Lead

Apr 2023 – Nov 2024

Led the rebuild of a per-client LMS into Tangerine365, one multi-tenant platform running on-premise at banks, as a self-serve cloud product, and inside Human Manager HRMS.

- Merged per-client codebases into one vanilla PHP 8 codebase with tenancy by subdomain or by ID, so a fix ships once instead of once per client
- Acted as solutions architect for client deployments: architecture, server sizing and specifications, and engineering's voice in stakeholder meetings
- Designed First Bank's three-tier on-premise deployment; deployed across IIS inside bank networks, Apache, DigitalOcean and AWS
- Wrote a SQL Server driver alongside the MySQL default, chosen at runtime, for banks that required it

- Consolidated the company's internal tools, staging and UAT onto one CyberPanel/LiteSpeed server with wildcard subdomains, cutting that hosting cost ~85%

ScholarshipIQ — Backend Engineer

Jun 2022 – Apr 2023

- Cut API response times ~50% through query optimisation and indexing; introduced staging and branching discipline, cutting production errors by over 90%

Bincom Dev Center — Backend Developer (apprenticeship)

Sep 2020 – Jul 2022

- Backend work in Node.js and PHP on ARM Learn for ARM Pensions and Social Lender; trained 5+ interns

SELECTED PROJECTS AND RESEARCH

Agent Contract

npm CLI that checks every write an AI coding agent attempts against repository rules and blocks out-of-scope changes before they land.

Terminox360

ATM fleet monitoring at Access Bank; sole engineer on a multi-tenant rebuild with CBN regulatory uptime, automated escalation and an on-premise AI option.

Repository memory for coding agents

Talk for PHP Talks Lagos and an experiment harness measuring whether a verified, human-gated decision log changes agent behaviour, including memory poisoning.

TrustCenta

Multi-tenant security platform wrapping OWASP ZAP, Gophish and CISO Assistant; rebuilt after a compromise and wrote the public post-mortem.

EDUCATION

Miva Open University — Master of Information Technology, specialising in AI

In progress

University of Lagos — BSc Nursing Science, Distinction (joint-highest CGPA)

2015 – 2021

Registered Nurse, Nursing and Midwifery Council of Nigeria, 2022.

SKILLS

Architecture: multi-tenancy, deployment design and infrastructure sizing, queues and event-driven workflows, offline-first sync, security hardening

Languages and frameworks: PHP (Laravel and vanilla), TypeScript, Node.js, React, Next.js, Livewire

Data and infrastructure: MySQL, PostgreSQL, SQL Server, Redis, Kafka, Elasticsearch, Docker, Linux, IIS, Apache, LiteSpeed, DigitalOcean, AWS

AI: Claude, OpenAI and Ollama integrations; agent-first development; governance for coding agents

WRITING

Engineering essays on Codeplified (semeton.substack.com), including *The Architecture I Didn't Design* and *Beyond Prompts: Repository Governance for AI Coding Agents*.