
Nassoro Cholobi

Software Engineer | Full-Stack Developer DevOps & Systems Integration Specialist

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I design, develop and deploy secure, scalable digital solutions that simplify business processes and improve service delivery. My experience spans government information systems, professional registration, sales platforms, e-learning and infrastructure, from requirements analysis and architecture through deployment, monitoring and maintenance.

CORE TECHNICAL SKILLS

Backend & architecture

Java, Spring Boot, Python, Django REST Framework, PHP, Laravel, FastAPI, REST APIs, microservices, JWT authentication, role-based access control and background jobs.

Frontend

React, Next.js, TypeScript, JavaScript, Material UI, Tailwind CSS, PrimeReact, TanStack Query, Router, Table and Form, Redux Toolkit and RTK Query.

Data & reporting

PostgreSQL, MySQL, database modelling, query optimization, data migration, reporting and analytics, and multi-database applications.

DevOps & infrastructure

Docker, Docker Compose, Git, GitLab CI/CD, Linux, Nginx, Apache, VPS and on-premises deployment, Wazuh, Grafana, Proxmox, backups and disaster-recovery planning.

APIs & integration

Kong API Gateway, Spring Cloud Gateway, JWT, OAuth-based authentication, government and third-party APIs, payments, webhooks, Beem Africa and Twilio SMS integration.

AI & document intelligence

Retrieval-Augmented Generation, LlamaIndex, LangChain concepts, Ollama, local language models, embeddings, vector databases, semantic search and document question answering.

SELECTED ENGINEERING PROJECTS

Tanzania Nursing and Midwifery Council Information Systems

Designed, developed and maintained digital services for regulatory operations, including student indexing, examinations, professional registration, licence renewal, CPD, school accreditation, transcripts, certificate printing and dispatch, and administration and reporting.

Technologies Java, Spring Boot, Django, Laravel, React, PostgreSQL, MySQL, Docker, REST APIs.

TNMC Microservices Platform

Developed independent services for students, institutions, programmes and regulatory services. Designed REST APIs and PostgreSQL databases, implemented JWT authentication, containerized services, configured gateway routing, and built validation, mapping and error handling.

Technologies Java 21, Spring Boot, PostgreSQL, Redis, Docker, Kong, Django, JWT.

Selected engineering projects

CONTINUED

Nurse Anaesthesia E-Logbook

Developed an electronic logbook for clinical procedure recording, rotation tracking, supervisor verification and competency assessment. Built student progress dashboards, coordinator reports and role-based access control.

Technologies Django REST Framework, React, Material UI, PostgreSQL, REST APIs.

SHIMIWI Sports Management System

Developed and deployed a web-based sports information system covering competitions, events, teams, participants, news, results and standings, with an administrative dashboard and role-based access control.

Technologies Django REST Framework, React, Vite, PostgreSQL, Tailwind CSS, PrimeReact, Redux Toolkit, Docker, Nginx, GitLab CI/CD.

Pata Sales Management Platform

Designed a sales and marketing platform with separate authentication and business services. Features include product and inventory management, customers, orders, payments, sales reporting, secure authentication, SMS notifications and API gateway protection.

Technologies Django, Spring Boot, Next.js, Material UI, PostgreSQL, Kong API Gateway, Docker, JWT.

AI-Powered Regulatory Document Assistant

Designed a RAG solution for searching and answering questions from Acts, regulations, guidelines and organizational policies. Capabilities include document ingestion, semantic search, context-based answers, source referencing and local model deployment.

Technologies Python, FastAPI, LlamaIndex, Ollama, embedding models, vector databases.

PEP-MIS Monitoring Dashboard

Contributed to requirements and design for monitoring training and professional-development programmes. The dashboard covers registration, attendance, progress, assessments, completion, certificates, and regional and institutional performance, with programme and reporting-period filters.

EDUCATION

Bachelor's Degree in Software Engineering

University of Dodoma, Tanzania

PROFESSIONAL STRENGTHS

Analytical problem-solving; translating business requirements into practical technical solutions; secure software development; complete lifecycle delivery; strong database and API engineering; independent and collaborative working.