JOSEPH NJOROGE KARIUKI

Software and DevOps engineer · Nairobi, Kenya

njorojoe19@gmail.com · github.com/ipswyworld · linkedin.com/in/joseph-njoroge-kariuki-5027591ab

SUMMARY

Backend and full-stack engineer focused on fintech and payments, specifically the reliability-critical parts: payout orchestration, reconciliation, idempotency, and the tooling that lets operations teams manage their own workflows without engineering support. I care about systems that are easy to understand when they break, not just when they are working.

SKILLS

LANGUAGES	Python, JavaScript, TypeScript, Node.js, Ruby on Rails, Rust (blockchain), PHP, Go (familiar), .NET
BACKEND	REST APIs, GraphQL, microservices, serverless (AWS Lambda), background workers, RabbitMQ
DATASTORES	PostgreSQL, MySQL, MongoDB, Redis, Elasticsearch, Apache Hadoop
CLOUD & INFRA	AWS (EC2, Lambda, RDS, S3, CloudFront), Docker, CI/CD (GitHub Actions / GitLab CI), IaC basics
TESTING	Unit and integration testing, TDD, automated E2E (Cypress), testable architecture
RELIABILITY	Prometheus / Grafana, structured logging, alerting, SLOs, incident postmortems
SECURITY	OWASP-aware design, secrets management, credential storage, input validation and hardening

EXPERIENCE

SENIOR ENGINEER, FREELANCE & CONTRACTOR

2022 – Present

Remote

Lead engineer across fintech, payments orchestration and blockchain tooling engagements, working directly with product managers and operations teams to build systems around field constraints.

- Designed payout orchestration with idempotent job execution: safe replays, no duplicate disbursements, a full audit trail across provider integrations.
- Implemented reconciliation workers that compare provider callbacks against internal ledger entries and produce audit-ready CSV reports.
- Built and hardened CI/CD pipelines with automated testing, linting, vulnerability scanning and staged deployments (canary / blue-green).
- Set up structured logging and monitoring dashboards so engineers could diagnose incidents in minutes rather than hours.
- Built lightweight admin tools and CSV workflows so non-technical teams could manage payment batches and run safe manual interventions.

FRONTEND & SYSTEMS ENGINEER, CONTRACT ENGAGEMENTS

2020 – 2022

Nairobi / Remote

Production-grade frontends and backend services focused on accessibility, resilience under unstable network conditions, and operational tooling for distributed field teams.

- Built SPAs and admin dashboards integrating securely with backend microservices and role-based access control.
- Implemented offline/queuing strategies and idempotent action patterns for unstable networks, keeping state transitions recoverable.
- Delivered automated test suites in PR workflows that reduced regression rates and improved deployment confidence.

DATA ANALYST / IT OFFICER

2018 – 2020

Nairobi City County Government, IT Department

Government data systems, network infrastructure and digital operations across county departments.

- Managed network infrastructure: troubleshooting, software updates and health monitoring across county offices.
- Supported database operations using Apache Hadoop to handle large datasets on city government servers.
- Handled data entry, validation and reporting for county administrative and planning functions.

OWN PLATFORMS

- Chama Cha Mimi na Wewe: a Kenyan party's live civic platform, Next.js and FastAPI inside a 500 MB cPanel quota.
- RentPin: caretaker-verified Nairobi rentals, FastAPI and Expo, pre-launch.
- Ouroboros Network: a tiered blockchain, Rust and Python, on testnet.

EDUCATION AND TRAINING

- BSc Computer Science, St. Paul's University, Nairobi Campus
- Diploma in Computer Science (Credit), St. Paul's University, Nairobi Campus
- Certificate in Computer Science, St. Paul's University, Nairobi Campus
- IBM Introduction to Artificial Intelligence; IBM AI Fundamentals (IBM SkillsBuild)
- AWS Fundamentals / Cloud Practitioner: in progress

References available on request.