

MAKOKHA MARK KITTS

Software Engineer — Backend & Data Systems

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PROFESSIONAL SUMMARY

Backend and data engineer with 7 years building high-throughput data pipelines, distributed systems, and cloud infrastructure across fintech, GIS, and financial services. Founded an independent software consultancy that has delivered enterprise engagements including a multi-platform ETL architecture for ESRI Eastern Africa. Track record of migrating legacy monolithic systems to cloud-based microservices and cutting processing latency through asynchronous architecture.

TECHNICAL SKILLS

- Backend & Data: Python (FastAPI, Django, Flask, Pandas), SQL, ETL pipeline design, RESTful API architecture
- Cloud & Infrastructure: AWS (Lambda, EC2, S3, RDS, ECS, Glue, Athena, CloudFront), Docker, Kubernetes, Terraform
- Databases: PostgreSQL, Oracle SDE, MySQL, MongoDB, Redis — schema design & performance tuning
- Delivery: Git/GitHub, CI/CD (GitHub Actions, Jenkins), Agile/Scrum, unit testing

WORK EXPERIENCE

Founder & Software Engineer — Evezezer Tech

Nov 2023 – Present

Independent software consultancy, Nairobi, Kenya (self-founded; concurrent with full-time engagements below)

- Built and lead a software consultancy delivering backend, data, and integration projects for clients, including a multi-platform ETL engagement for ESRI Eastern Africa (Jan–Oct 2025, detailed below).
- Architected an event-driven data stream using Python FastAPI, RabbitMQ, and WebSockets for real-time client notification delivery.
- Engineered a secure microservices architecture integrating multiple payment gateways (M-Pesa, Stripe, PayPal) for client platforms, improving transaction success rates.
- Rebuilt a client's core request path with asynchronous task queues and optimized data-retrieval patterns, taking response times from multi-second delays down to sub-second delivery.

GIS Developer Consultant — ESRI Eastern Africa

Jan 2025 – Oct 2025

Client engagement delivered through Evezezer Tech, Nairobi, Kenya

- Architected automated ETL pipelines synchronizing real-time spatial data across three enterprise platforms (INCMS, DCS, ArcGIS Enterprise), cutting manual data-entry work by roughly 80%.
- Designed intermediate database schemas and audit tables to support high-frequency data exchange and workflow tracking.
- Optimized relational database performance through advanced indexing and query tuning, cutting latency on mission-critical network design datasets.
- Led migration of large-scale datasets from PostgreSQL to Oracle, implementing branched versioning to support multi-user editing environments.

Web Application Developer — BSystems Kenya

Nov 2020 – Jul 2023

Nairobi, Kenya

- Led migration of a legacy monolithic application to a cloud-based microservices architecture on AWS, sustaining 99.9% uptime across 10,000+ daily transactions.
- Optimized SQL queries and database schemas for the GVIVE ID verification system, improving data-retrieval speed by roughly 50%.
- Built and automated CI/CD deployment pipelines, moving the team from weekly releases to multiple deployments per week.
- Mentored 5+ junior engineers on data security and role-based access control (RBAC) practices, reducing reported system vulnerabilities.

Information Technology Analyst — Dyer and Blair Investment Bank

Aug 2019 – Aug 2020

Nairobi, Kenya

- Automated routine data-management and system-monitoring tasks with custom Python and Bash scripts, saving an estimated 15+ hours per week.
- Maintained 99.5% network and database uptime through proactive monitoring and rapid incident response for 200+ staff members.

Business Development Assistant — Katridges Kenya

Jan 2017 – Jul 2019

Nairobi, Kenya

- Led a 7-person sales team, managing client relationships and driving product sales for IT hardware and office equipment.
- Acted as primary liaison between clients and technical support staff, translating client needs for system and printer installation/maintenance requests.
- Coordinated on-site maintenance scheduling and vendor support for client systems and printers — early exposure to IT operations that led directly into my move into technical roles.

EDUCATION & CERTIFICATIONS

- B.S. Data Science and Analytics — United States International University Africa (in progress, online)
- B.S. Informatics — Strathmore University (database administration & software development focus)
- Associate Degree, Software Engineering — Holberton School
- AWS Certified Cloud Practitioner