

GEORGE ALFRED NYAMEMA

DATA SCIENTIST & TECH LEAD | FULL STACK DEVELOPER & AI ENGINEERING EXECUTIVE

Nairobi, Kenya · (+254) 745 970 119 · georgenyamema@gmail.com

github.com/GAN-007 · linkedin.com/in/george-nyamema-5684181

EXECUTIVE SUMMARY

Data Scientist, Tech Lead, Full Stack Software Engineer and AI Engineer with multidisciplinary experience spanning financial technology, production software engineering, business intelligence, advanced SQL analytics, artificial intelligence, cloud systems, financial modelling, automation and technical leadership. I design and deliver secure, maintainable and data-driven systems connecting business requirements to software, analytical models, dashboards, APIs, operational workflows and executive decision support.

At SEVI, I work across data science, fintech analytics and technical leadership, building and governing analytical solutions used in credit-risk, collections, customer-success, operations, finance and management decision-making. My engineering background spans Python/Django/DRF/Flask/FastAPI, JavaScript/React/Vue/PHP, PostgreSQL/MySQL, REST APIs, Docker/Linux/Git/CI/CD/cloud, application security, ML/NLP/LLMs/multi-agent systems and responsible AI. Accounting, CPA and financial-modelling training strengthens my understanding of data integrity, controls, risk and commercial performance.

CORE COMPETENCIES

- **Data Science & BI:** Advanced SQL, dashboards, cohort/lifecycle/customer/portfolio analytics, KPI governance, data quality, predictive analytics, executive reporting.
- **Leadership & Strategy:** Technical direction, architecture, cross-functional delivery, stakeholder management, governance, risk, documentation.
- **Software Engineering:** Full-stack/backend/frontend, REST APIs, integrations, automation, auth, testing, debugging, maintainability and scalability.
- **Finance & Risk:** Financial modelling, accounting, repayment/collections/credit-risk analytics, reconciliation, controls, valuation, Sage and QuickBooks.
- **AI & Automation:** ML, NLP, LLMs, LangChain, Hugging Face, OpenAI API, multi-agent systems, responsible AI and predictive modelling.
- **Cloud & DevOps:** Linux, Git/GitHub, Docker, Kubernetes, CI/CD, AWS, GCP, Azure, Firebase, deployment and monitoring.

TECHNICAL SKILLS

Backend: Python, Django, DRF, Flask, FastAPI, PHP, JavaScript, REST, GraphQL, JSON, AJAX. **Frontend:** HTML5, CSS3, JavaScript, React.js, Vue.js. **Data:** PostgreSQL, MySQL, MongoDB, SQLite, Firebase, relational modelling, indexing and analytical SQL. **AI/ML:** TensorFlow, PyTorch, Hugging Face Transformers, LangChain, OpenAI API, NLP, deep learning, predictive modelling and multi-agent systems. **Engineering:** AWS, GCP, Azure, Docker, Kubernetes, Linux, Git/GitHub, CI/CD, monitoring, performance optimisation, encryption, HTTPS, access controls, secure auth, XSS/CSRF/SQL-injection prevention.

PROFESSIONAL EXPERIENCE

Data Scientist & Tech Lead | SEVI

Nairobi · August 2025 — Present

- Lead data-science, analytical-engineering and technical initiatives supporting fintech operations, credit-risk, collections, customer-success, seller performance, finance and executive decisions.
- Design complex PostgreSQL/Metabase analytics, dashboards and datasets; define and govern KPIs; investigate data-quality discrepancies and reconcile metrics.
- Analyse credit, repayment, collections, portfolio seasoning, delinquency, onboarding, first trade, repeat trading, dormancy and retention; translate policy into maintainable analytical logic.
- Apply Python/SQL/full-stack engineering to automation, internal tools and APIs; provide technical architecture, troubleshooting and responsible-AI guidance.

Full Stack Developer | 5ived.com

Nairobi · 2024 — July 2025

- Owned requirements, architecture, frontend/backend engineering, databases, testing, deployment, documentation and production support.
- Built Python/Django/Flask backends, React/Vue interfaces, REST APIs, PostgreSQL/MySQL schemas, integrations, secure controls, CI/CD and Linux/cloud deployment.

Full Stack Software Engineer | Creativebits LLC

Nairobi · December 2023 — May 2024

Built PHP/Python/React/Vue systems, APIs, dashboards, data-visualisation tools and Sage accounting integrations; improved security and performance with encryption, sanitisation, caching and indexing.

Full Stack Developer | Upwork

Nairobi · May 2020 — Present

End-to-end client software using PHP, Python, Flask, SQL, JavaScript, AJAX, JSON, HTML and CSS, including requirements, implementation, testing, deployment, hosting, security, maintenance, documentation and training.

Lead Web Developer | Aqua Links Ke

Nairobi · May 2020 — July 2020

Designed e-commerce solutions, integrated frontend/backend/SQL/AJAX, optimised performance and maintained responsive, accessible digital experiences.

Web Developer / Researcher / Graphic Designer | Self-Employed

Nairobi · January 2020 — December 2020

Built bespoke websites, researched technologies/design trends, managed project lifecycles, produced multimedia assets and delivered documentation/training.

Third-Party Web Developer | Free Website Guys

Nairobi · June 2019 — December 2019

Built responsive HTML/CSS/JavaScript/jQuery websites, WordPress/HubSpot implementations, e-commerce features, QA, launch, maintenance and client training.

Staff | Sai Offices: Enterprise Road

Nairobi · April 2017 — August 2017

Administrative/clerical support, communications, scheduling, document processing, equipment/vendor coordination, meetings, travel and office operations.

EDUCATION

- Bachelor's in Information Technology — Dedan Kimathi University, Oct 2021
- Diploma in Financial Modeling & Valuation Analysis — Corporate Institute of Finance, Oct 2022
- Professional Diploma in CPA (Levels 1 & 2) — KCA University, Dec 2019 — Apr 2021
- Certified Python Programmer — Computer Pride College, Mar 2021
- Certificates in Web Development, Graphics Development and Computerized Accounting (Sage, Pastel, Tally, QuickBooks) — KIPS College, Jul 2017

AWARDS & CERTIFICATIONS

Machine Learning & Python Bootcamp — DEVTOWN · Web Development Bootcamp — DEVTOWN · monday.com Project Management Certification

SELECTED SPECIALISATIONS

Fintech data science and analytical engineering · credit-risk/portfolio/repayment/collections analytics · BI/KPI governance/executive reporting · customer/seller/transaction lifecycle analytics · full-stack/backend systems · APIs/automation/integration · AI/LLMs/NLP/multi-agent systems · cloud/DevOps/security/reliability · financial modelling/accounting systems · technical leadership/architecture/cross-functional delivery.

LANGUAGES & REFEREES

English: Native / Professional Fluency · Swahili: Native / Professional Fluency

Referees: Available upon request.