

Kelvin Ng'eno

Nairobi, Kenya | +254 726 299 179 | hello@ngenondumia.com | github.com/ngenome
linkedin.com/in/kelvin-ngeno | ngenondumia.com

Professional Experience

AI Engineer & CTO | Navismart AI

Feb 2025 - Present

- Lead technical direction and delivery for an AI-powered immigration platform across agentic systems, backend architecture, security, and product development.
- Built AI interviewing workflows for tailored practice and feedback, plus Browser Use agents for live web interaction within agentic workflows.
- Designed document ingestion pipelines using OCR and VLM-assisted parsing to extract, validate, and structure data from immigration documents.
- Orchestrated LangGraph and OpenAI Agents SDK workflows across form-filling guidance, document review, tool use, and interview preparation.
- Designed and scaled Django and FastAPI services with async architecture, RBAC, PII encryption, audit logging, secrets management, automated testing, and preview deployments.

Founder | Dissolve Software

Jan 2024 - Present

- Founded a software consultancy delivering web, mobile, AI, and automation systems for SMEs and media clients.
- Built agentic RAG, semantic search, facial recognition, reverse image search, and image-similarity systems for a Standard Digital digitization project using LangChain, LangGraph, pgvector, ChromaDB, embeddings, and orchestrated LLM agents.
- Fine-tuned HRM-Text-1B for code and SQL generation and Gemma 3 4B via LoRA for Kikuyu-English translation; built OCR and VLM pipelines to extract, clean, and prepare training data.
- Built speech-recognition systems using Whisper fine-tuning, Zipformer and CTC architectures, FFT, and mel spectrograms.
- Developed ML prototypes for credit risk and fraud scoring, anomaly detection, and dynamic pricing using scikit-learn, XGBoost, LightGBM, FastAPI, and Redis.
- Deployed models on Modal and published models and datasets on Hugging Face, including a Kikuyu ASR dataset with 153,000+ preprocessed rows and a dialogue dataset with 7,500+ monthly downloads.

Consultant Developer | Mes & Dak Corporation

Oct 2024

- Completed a two-week consulting engagement reviewing architecture, database design, performance bottlenecks, and broken user flows for the M'Network and M'Butic platform.
- Delivered an 80-page technical audit with prioritized recommendations for fixes and improvements.
- The development team implemented the recommendations, resulting in measurable improvements to performance, stability, and user experience.

Full Stack Mobile Developer | Jobzy Limited

Mar 2024 - Mar 2025

- Scaled Talanta AI App to 20,000+ active users across iOS and Android.
- Added AI-powered resume and cover letter generation, enabling users to create job applications faster and making the app more engaging.
- Built the Talanta AI mobile app end-to-end with React Native: converted Figma designs into responsive code, integrated backend APIs, and implemented authentication with multiple OAuth providers.

Full Stack Engineer | M-jenzi

Jan 2023 - Mar 2024

- Built an award-winning multivendor e-commerce platform for construction materials (1st Kenya E-commerce Award).
- Designed vendor dashboards, an admin portal, and a React Native mobile app deployed to production.
- Optimized backend architecture, cutting load times by more than 40% and improving user experience.
- Built Buy Now, Pay Later payment systems and managed database design, DevOps, and deployments on AWS and Azure.

Full Stack Developer | Wera

Jun 2022 - Nov 2022

- Built a service procurement platform end-to-end across web and mobile, enabling provider-client interactions.
- Developed a Django REST Framework and PostgreSQL backend plus a React Native mobile app for service providers.
- Handled the full deployment pipeline from API setup to production web and mobile releases.

Frontend Developer | United States of Africa | Part-time

Feb 2022 - Oct 2022

- Implemented meeting-room, chat, and participant-management features for Zumaridi's video-conferencing platform.
- Converted Figma designs into responsive React and Tailwind CSS interfaces for desktop and mobile.

Mobile Developer | Snobole Software

Jan 2022 - Jun 2022

- Delivered a cross-platform laundry-services app with React Native and Expo, converting Adobe XD designs into responsive interfaces.
- Integrated Stripe payments and applied accessibility and performance practices across Android and iOS.

Skills

- **Programming:** Python, JavaScript/TypeScript, SQL
- **Backend:** Django, Django REST Framework, FastAPI, Flask, Node.js, Fastify, PostgreSQL, MySQL, MongoDB, Redis, Kafka, GraphQL
- **Frontend & Mobile:** React, Next.js, Vue.js, Tailwind CSS, React Native, Expo
- **AI Engineering:** LangChain, LangGraph, OpenAI Agents SDK, Browser Use, RAG, OCR, document ingestion, pgvector, ChromaDB, embeddings, context engineering
- **Machine Learning:** PyTorch, TensorFlow, scikit-learn, Transformers, Unsloth, vLLM, NumPy, Pandas
- **NLP & Speech:** ASR, Whisper, Zipformer, CTC, neural machine translation, tokenization, FFT, mel spectrograms
- **MLOps & Cloud:** Modal, Hugging Face, AWS, Azure, Docker, Kubernetes, CI/CD, Weights & Biases
- **Monitoring & AI Tooling:** Sentry, Prometheus, Grafana, PostHog, Claude Code, Codex, GitHub Copilot

Key Projects

- **Navismart AI** (navismartai.com) - AI immigration platform with agentic form guidance, document ingestion and review, browser automation, and AI interview preparation.
- **Galexia AI** (www.galexia.ai) - AI visual intelligence platform for raster, vector, and interactive 3D visualizations.
- **Kikuyu-English Translator** (huggingface.co/InterstellarCG/kikuyu-translator-final) - Fine-tuned Gemma 3 4B via LoRA for bidirectional Kikuyu-English translation.
- **M-jenzi Platform** - An award-winning multivendor e-commerce solution for construction industry
- **FarmZ** - Farm expense tracking app that replaced Excel, improving financial transparency and cutting manual reconciliation time