SIMON MUTHUNGU

Software Engineer · AI Automation Engineer · Production RAG & Agent Systems · QA Engineer

+254 758 958016 · henrymsechu1@gmail.com · simonm.househub.co.ke · linkedin.com/in/simon-muthungu-b149821b6

TECHNICAL SKILLS

Languages	Python (6 years production), JavaScript / TypeScript, SQL, PHP, Elixir
AI / LLM Systems	LangChain · LangGraph · RAG pipelines · Vector Databases (Pinecone, Weaviate) · Prompt Engineering · Multi-agent systems · Hugging Face · Vercel AI SDK
Backend & APIs	FastAPI · Django · Flask · Laravel · Elixir Phoenix · REST APIs · Workflow automation (n8n, Zapier, Make)
Frontend	React · Next.js · Tailwind CSS
Cloud, DevOps & Tools	AWS (ECS, Fargate, ECR, ALB, CloudWatch, EC2) · Docker · Kubernetes · Terraform · CI/CD · GCP Cloud Run · Vercel · Git · Jira
Data & Observability	PostgreSQL · MySQL · Supabase · Prometheus · Grafana · OpenTelemetry · LangSmith
AI / ML Practice	End-to-end production agents · Document intelligence (PDF parsing, chunking, embeddings) · Model evaluation & grounding · Predictive models (TensorFlow)

SUMMARY

Software Engineer and AI Automation specialist with 6 years of Python development experience. Builds production-grade intelligent systems — from full-stack platforms to RAG agents and multi-step LLM workflows that ground outputs in real data and reduce operational risk. Comfortable shipping both conventional software for local businesses and advanced agentic AI systems used internationally.

PROFESSIONAL EXPERIENCE

Software Engineer & Project Lead — Home Dispo (homedispo.com)

February 2025 – October 2025 · Remote · US-based startup

- Designed and shipped APIs that cut data retrieval time by 30%, improving platform responsiveness for end users.
- Led a team of 4 to deliver a complete real-estate platform, accelerating feature delivery by 20% through clear agile processes.
- Strengthened backend performance and database queries; introduced Playwright automated testing that stabilized releases.
- Created internal automation tools that removed repetitive work and raised team productivity by 60%.

Production Team Leader — Househub (househub.co.ke)

September 2023 – January 2025 · AI-powered student accommodation platform

- Built the core backend and API layer that powered fast, reliable property search and real-time listing sync for thousands of student users.
- Owned product direction and data workflows from concept to public launch, ensuring the platform solved real student housing pain points.
- Led a lean technical team through full product lifecycle with consistent delivery and clear technical ownership.

SELECTED PROJECTS

Agent Complynt — RAG Compliance Intelligence System

Live: https://agent-complynt-v2.vercel.app

Built a complete RAG pipeline (PDF parsing → intelligent chunking → embeddings → Pinecone → LangGraph streaming) that helps SMEs and NGOs analyse tenders and legal documents. Cuts manual review time, lowers disqualification risk, and protects revenue by accelerating compliance readiness.

Agent Sentinel — AI Risk & Vendor Compliance Pipeline

Live: https://agent-sentinel-frontend-wsj1.vercel.app

Designed a modular agentic system (retrieval → reasoning → guardrails → synthesis → human review) for vendor risk evaluation. Added full observability (Prometheus, Grafana, OpenTelemetry) and persistent audit trails in Supabase. Deployed on GCP Cloud Run as a production-ready governance tool.

AURA Agent — Serverless Conversational AI

Live: https://agent-aura.vercel.app/aura-agent/playground/

Shipped a low-latency conversational agent on Vercel serverless + Supabase using LangServe/LangChain. Shows how grounded AI assistants can handle support and internal queries while reducing operational cost.

AI & ML Lead — Proacted & Enactus (SmartFarm)

March 2023 – June 2025 · smartfarm.enactusmasenochapter.africa

Live system: https://proactedai.co.ke

Led design and delivery of predictive machine-learning models that improved operational efficiency by 25% for student and education use-cases. Built TensorFlow models, refactored core systems for speed, and guided cross-functional teams to ship AI features on time. Also developed workflow automation (Zapier, Make, n8n) that raised process speed by up to 70%.

EDUCATION & CERTIFICATIONS

Maseno University — BSc Computer Science (2022)

FreeCodeCamp: Certified Python Developer · Relational DB Expert · Frontend Developer (2018)

GDGoC AI/ML Lead (2025) · Nexus Backend AI Developer (2024) · Deep Learning IndabaX Organiser (2024) · MUCISA Hackathon Lead (2024–2026)