ABDULLATIF MNYAMISI

AI Systems Engineer • Full-Stack & Mobile Developer

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SUMMARY

Computer Science finalist specializing in AI-enabled systems and full-stack engineering. I design and build production-ready platforms that connect field operations, web dashboards, and AI layers—especially in agriculture, health, and productivity domains. My work focuses on turning complex, low-infrastructure environments (rural farms, hospitals, small enterprises) into data-driven, automated systems with clear business impact.

CORE SKILLS

- Programming & AI: Python, Scikit-learn, Pandas, LangChain, LLM function calling, RAG systems
- Web: React, Next.js, Node.js, Express, REST APIs, Tailwind CSS
- Mobile: React Native, Expo, offline-first sync patterns
- Data & Storage: SQL, PostgreSQL, Supabase, schema design, basic analytics & visualization
- Architecture: Micro-feature design, API design, RBAC, event-driven flows, system modeling
- Dev Practices: Git/GitHub, environment separation, logging, basic testing and observability

EDUCATION

BSc in Computer Science — Finalist Student UDSM (2023–2026)

- Focus: Software Architecture, Databases, Algorithms, Artificial Intelligence
- Academic projects include data structures, operating systems, and applied AI coursework

Full Stack Web Development Bootcamp — Udemy (Dr. Angela Yu) (2024–2025)

- Covered: HTML/CSS/JS, React, Node.js, SQL, authentication, deployment, Git workflows

- Built end-to-end applications with front-end, back-end, and database integration

Python Engineering & Automation — Advanced Certification (2023–2026)

- Focus: Python for automation, web scraping, data processing, and introductory ML

- Built scripts to clean, transform, and report on real-world datasets

KEY PROJECT EXPERIENCE

Maize Inventory SaaS System — Lead Full-Stack Developer (2025–Present)

- Designed an AI-enabled platform for agro-dealers to track stock, production (flour/feed), and sales.

- Implemented core modules for inventory, basic demand forecasting with Scikit-learn, and reporting.

- Stack: React front-end, Python services, Supabase / SQL for storage, Tailwind for UI.

RAG Documentation Bot — AI & LLM Engineer (2025–Present)

- Built a specialized agent that ingests private PDFs and returns context-aware answers.

- Implemented document parsing, chunking, vector search, and structured function-calling prompts.

- Stack: Python, LangChain, OpenAI API, ChromaDB or similar vector store, Streamlit UI.

Task Management System — Software Engineer (2025)

- Developed a Kanban-style web application for task tracking and collaboration.

- Implemented optimistic UI updates, multi-user support, and activity logging concepts.

- Stack: React, Node.js/Express, MongoDB (or SQL), real-time patterns with Socket.io.

Secure Auth To-Do (Supabase/Next.js) — Full-Stack Developer (2025)

- Built a secure To-Do application with modern authentication and row-level security.

- Implemented OAuth / magic link patterns, protected APIs, and dark-mode optimized UI.

- Stack: Next.js, Supabase Auth, PostgreSQL, Tailwind / Framer Motion for UX.

Agro-Mobile Client — Mobile Developer (2025)

- Designed the mobile interface for a Maize SaaS platform used by field workers.

- Focused on offline-first patterns, background sync, and low-bandwidth optimizations.

- Stack: React Native, Expo, SQLite / local storage, REST API integration.

Python Automation Engine — Automation Engineer (2024–2025)

- Created a suite of headless scripts for scraping, cleaning, and visualizing agricultural market data.

- Automated CSV/Excel report generation and email delivery of insights.

- Stack: Python, Requests, BeautifulSoup, Pandas, Matplotlib.

FUTURE SYSTEMS & ARCHITECTURE VISIONS

The Sisal Project — Supply Chain ERP (Vision)

- End-to-end sisal ERP covering land mapping, nursery management, field operations, harvest, decortication, warehousing, exports, and finance.

- Designed with strong performance and security: modular services, indexed/partitioned DB, offline-first mobile, RBAC/ABAC, encryption, tamper-evident audit logs, and AI for forecasting and anomaly detection.

AgriTrust Platform — Agriculture Fintech (Vision)

- Salam-based Islamic finance engine for funding and supervising farmers, with input allocation tracking and trust-based scoring.

FieldSense AI — Mobile AI & LLM (Vision)

- Mobile “AI Field Supervisor” that converts voice reports into structured data, with offline-first reporting and risk detection.

Afya-Link — HealthTech Hybrid Ecosystem (Vision)

- Connects patient mobile apps with hospital portals, including AI-based symptom triage and medical report summarization.

TECHNICAL STRENGTHS

- AI & Data: RAG, vector search concepts, prompt engineering, basic ML models (classification/regression).

- Full-Stack: React/Next.js, Node.js/Express, REST API design, Supabase/PostgreSQL.

- Mobile: React Native/Expo, navigation, state management, offline-first flows.

- System Design: Domain modeling, modularization, event logs, role-based access control.

SOFT SKILLS

- Systems Thinking: Always mapping how data flows from the field to dashboards and decisions.

- Communication: Able to explain complex AI or architecture decisions in business language.

- Ownership: Treats projects like products—focusing on reliability, usability, and maintainability.

- Learning: Continuously upgrading skills in AI orchestration, cloud patterns, and secure architecture.

CURRENT FOCUS

- Maturing Maize Inventory SaaS into a production-ready platform.

- Deepening expertise in LLM orchestration, RAG systems, and AI-driven analytics for agriculture and health.

- Seeking part-time roles, internships, or junior positions where I can own real modules and ship value.