ABDULRAHMAN AMBOOKA MSAH

ERPNext / Frappe Developer | Software & Systems Integration

Nairobi, Kenya | +254 111 384 390 | abdulrahmanambooka@gmail.com

Portfolio: https://ambooka.dev | GitHub: https://github.com/ambooka

PROFESSIONAL SUMMARY

Computer Science graduate with ERPNext implementation experience and hands-on development of custom Frappe applications for school operations. Build Python business logic, DocTypes, approval workflows, permission rules and authenticated API integrations. Through Sufrone, connect ERPNext with school websites and parent/staff applications. Also bring full-stack development, production M-Pesa integration and operational IT support experience.

TECHNICAL SKILLS

ERPNext / Frappe: Custom apps, DocTypes and fields, document hooks, roles and permissions, approval workflows, academic reports, Desk workspaces, REST APIs, installation and migration hooks.

Development: Python, JavaScript, TypeScript, SQL, React, Next.js, Node.js, FastAPI and Flask.

Integration & deployment: ERPNext financial document relationships, Safaricom Daraja API, PostgreSQL, Redis, asynchronous workers, Docker / Compose, Linux, Git and CI/CD.

SELECTED DEVELOPMENT PROJECTS

Sufrone Education / Bayinah Academy — Custom ERPNext/Frappe Platform

Active development | Public demonstration: https://education.sufrone.com

- Developed the bayinah_school and bayinah_bridge Frappe app packages, extending ERPNext, Frappe Education and HRMS through supported hooks and additive installation/migration routines without editing upstream core source.
- Implemented custom DocTypes, fields, document validation and approval workflows for school operations, including teaching assignments, academic reports, transport, supply requests, welfare and department services.
- Built role-based Desk access and record-level permission checks; restricted teacher access using teaching assignments and separated sensitive health and welfare responsibilities.
- Implemented reviewed academic reports linked to native assessment results, including completeness checks, controlled publication and printable report output; added JavaScript form behaviour and workspace navigation.
- Built authenticated Frappe API endpoints for admissions, student records, attendance, published results and fee reconciliation. Added guarded, idempotent payment allocation using native Sales Invoice and Payment Entry relationships.
- Connected the ERP with the school website and parent/staff portals; deployed a fictional-data demonstration with credential-free role previews and tested permissions, API handoffs and production runtime readiness.

Stack: Python, Frappe / ERPNext 15, Education, HRMS, JavaScript, TypeScript, Next.js, PostgreSQL, Docker and Linux. Source private; hosted demo available for interview review.

M-Pesa Integration Library — Client Project

2023 | Production client integration

- Built a Node.js / TypeScript library for Safaricom Daraja STK Push, B2C and C2B, with typed response schemas, retry handling and webhook validation; deployed in a live e-commerce environment.

PROFESSIONAL EXPERIENCE

Independent Software Developer — Sufrone (Part-time)

Part-time independent practice | Ongoing

- Started Sufrone as a part-time independent software practice; deliver custom business software and systems integrations as a solo developer alongside employed IT roles.
- Developed Sufrone Education: custom ERPNext/Frappe apps, connected school portals, parent/staff Android apps, APIs and a hosted fictional-data demonstration.

IT Administrator — Bayinah Academy

June 2026 – Present | Nairobi, Kenya

- Support school ICT infrastructure, user accounts, networking, institutional platforms and staff technical support.
- Manage onboarding/offboarding, access administration, website maintenance and digital communication services.
- Maintain CCTV, biometric attendance systems, printers and other ICT assets; troubleshoot connectivity, hardware and software issues.
- Prepare technical documentation, user guides and training materials to improve staff adoption of school systems.

IT Assistant — Hebatullah Brothers Limited

January 2025 – June 2026 | Nairobi, Kenya

- Implemented ERPNext from scratch: configured the chart of accounts, item catalogue and procurement workflows to replace manual processes across inventory, finance and HR.
- Rebuilt a static company website into a CMS, enabling the marketing team to manage content independently.
- Installed office switches, wireless access points, structured cabling and a VoIP phone system.
- Administered Windows Server, Active Directory, group policies and account lifecycles for 70+ office staff as part of a two-person IT team.
- Supported CCTV, biometric attendance for 300+ field workers and end-to-end hardware, software and connectivity helpdesk needs.

IT Infrastructure Intern — Masinde Muliro University of Science & Technology

May – August 2023 | Kakamega, Kenya

- Configured and deployed 40+ workstations for a new computer lab and resolved a recurring DHCP conflict affecting 200+ campus devices.
- Supported campus network administration, server-room operations and faculty/student technical support.

ADDITIONAL PROJECT

AI Surveillance System — Final-Year Research

2023 – 2024 | Maseno University

- Developed real-time object detection using YOLOv5/v8, OpenCV and PyTorch; benchmarked accuracy/latency and built a Flask API for inference, alerts and live-stream monitoring.

EDUCATION

BSc Computer Science — Maseno University

2020 – 2024 | Second Class Honours, Upper Division

Relevant study: software engineering, databases, algorithms, computer networks, operating systems and machine learning.

KCSE — Starehe Boys' Centre & School

2016 – 2019 | Nairobi, Kenya

LANGUAGES

English — Fluent | Swahili — Native