

NYONGESA EMMANUEL

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PROFESSIONAL SUMMARY

AI Engineering Fellow and Software Developer with over 6 years of experience in data science, software engineering, and digital solution development. Proven track record in delivering large-scale data projects, including onboarding 2.5 million farmers across East Africa, and improving data quality assurance by 25% through rigorous testing enhancements. Skilled in Flutter, Python, SQL, and Next.js; known for bridging technical and consulting teams to create impactful, scalable data-driven solutions.

WORK EXPERIENCE

Acting CTO & Senior Software Engineer – Amsa Capital Limited Jan 2025 – Dec 2025

- Designed, developed, and secured a full-scale investment platform from scratch, covering frontend, backend, and infrastructure.
- The system serves **over 2.7 million users in Kenya** and processes financial transactions with a **98%+ successful completion rate**
- Led system architecture, payment integrations, and security implementation to ensure reliability, scalability, and data protection.
- Built the platform using **HTML, CSS, Java, JavaScript, Next.js, Django, Python, PostgreSQL, and Firebase**, with **Docker** and **Git** for deployment and version control. Delivered a production-grade, scalable fintech solution aligned with the operational and regulatory needs of a modern investment firm.

Software Engineer – Agritrue Org

Sept 2024 – Aug 2025

- Led a **winning hackathon project, AgriTrue**, focused on empowering informed agriculture by actively combating misinformation within the agricultural sector.
- Conceptualized and guided the end-to-end development of the system, translating real-world agricultural challenges into a practical, technology-driven solution
- Designed the platform to promote data accuracy, trust, and evidence-based decision-making for farmers and stakeholders
- Coordinated a multidisciplinary team, providing technical leadership and ensuring timely delivery of a high-impact solution.
- The project was recognized for its innovation, relevance, and potential to drive sustainable and informed agricultural practices.

Software Engineer – Zingo Kenya

Jan 2023 – Apr 2024

- Led a team of 3 developers to deliver 5+ customer-centric solutions on schedule, improving user retention by 5%.
- Designed and launched Zingo Kenya scaling to 50 users with a 4.5 Play Store rating in its first quarter.
- Deployed AWS & Google Cloud (Firebase, Maps) infrastructure, cutting costs by 15% while ensuring 99.9% uptime.
- Established peer reviews & best practices, reducing bugs by 17% and accelerating onboarding by 22%.
- Mentored junior developers in scalable coding practices, boosting team productivity by 7%.
- Integrated M-Pesa & SasaPay APIs, enabling seamless payment processing (KES 100,000/month) and reporting.

Software Engineer – Fikisha Mashinani

Jun 2023 – Dec 2023

- Built Fikisha Mashinani (cross-platform delivery app) & Fikisha Riders (rider app) using Flutter, Node.js, and Firebase, serving 100+ users with <5% crash rate.
- Leveraged Firebase + Python back-end functions to handle user analytics and routing algorithms.
- Integrated M-Pesa payments, processing KES 50,000/month securely with 98%+ transaction success rate.
- Implemented real-time GPS tracking & rider allocation, reducing delivery times by 15% and improving customer satisfaction.
- Led cross-functional teams (product, UX, QA) deliver 5+ major features on schedule, aligning with business KPIs.

EDUCATION

Strathmore University

Master of Science in Data Science and Analytics

The Co-operative University of Kenya

Bachelor of Science in Applied Statistics and data science

Modcom Institute

Software Engineering

SKILLS SUMMARY

Languages:

Python, SQL, Dart, JavaScript, Node.js, Tailwind CSS

Platforms and Tools:

Firebase, MySQL, Power BI, Android Studio, Jupyter Notebook, Docker

Frameworks and Libraries:

Scikit-Learn, Pandas, NumPy, Matplotlib, Flutter, Next.js

Soft Skills:

Team Collaboration, Technical Mentorship, Agile Methodologies, Problem-Solving, Cross-Functional Communication, Stakeholder Alignment

May 2025 – Present Sep 2019 – Dec 2023

Jan 2022 – Feb 2023

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