



Geoffrey Kamondo

Electrical & Software Engineer | AI/ML Specialist | Data Scientist

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📍 Nairobi, Kenya

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About Me

I'm a multidisciplinary engineer with over nine years of experience spanning electrical systems, software development, artificial intelligence, and data science. My career began in traditional electrical engineering—power distribution and industrial automation—but I've since expanded into the intersection of hardware and intelligent software systems.

Whether debugging a faulty PLC on a packaging line, building customer segmentation models in PySpark, or evaluating large language model outputs, I bring the same analytical rigor to every problem. My recent work focuses heavily on AI model evaluation and machine learning applications, giving me deep insight into both the capabilities and limitations of current AI technologies.

Beyond technical work, I've led teams of up to 60 people during national census operations, teaching me the value of clear communication, systematic planning, and building trust with diverse stakeholders.

Technical Skills

Electrical Engineering

AutoCAD

PLC Programming

SCADA

PCB Design

Autodesk EAGLE

Power Systems

Industrial Automation

AI & Machine Learning

Python

TensorFlow

scikit-learn

NLP

Computer Vision

RLHF

GenAI Evaluation

Data Science

pandas

numpy

PySpark

Matplotlib

Seaborn

SQL

ETL Pipelines

Tools & Platforms

Git

AWS

Google Cloud

Docker

Adobe Creative Suite

Jira

Featured Projects



AI Model Evaluation Framework

Developed a 47-point evaluation framework for assessing generative AI outputs across accuracy, coherence, helpfulness, and safety dimensions. Adopted by a team of 12 evaluators, improving inter-rater reliability from 72% to 89%.

Python

NLP

Quality Metrics

Documentation



Customer Segmentation System

Built an unsupervised ML system processing 340,000 transactions for a retail company. Identified 7 distinct customer segments, resulting in 18% improvement in marketing campaign response rates.

PySpark

MLlib

K-means

Data Visualization



Predictive Maintenance Model

Graduate thesis project using ML to predict industrial equipment failures. Achieved 87% accuracy in predicting failures within 72-hour windows using sensor data and maintenance records.

Random Forest

Gradient Boosting

Feature Engineering

Python



Digital Census QA System

Led quality assurance for Kenya's first fully digital census. Tested CAPI application across devices, identified 34 critical issues before deployment. System supported enumeration of 47+ million citizens.

QA Testing

Mobile Systems

Documentation

Team Leadership

Work Experience

AI Research Specialist & ML Engineer

Remote | Various AI Research Platforms

January 2024 – Present

Evaluating generative AI systems for accuracy and quality. Completed 2,500+ evaluations, developed evaluation frameworks, and participated in RLHF processes for model training.

Data Analyst & Digital Content Strategist

Freelance | Nairobi, Kenya

November 2019 – December 2023

Executed 28 end-to-end data analysis projects. Built customer segmentation models, developed dashboards, and produced multimedia content for major clients including TikTok Kenya and GIZ.

ICT Supervisor – Kenya Census 2019

Kenya National Bureau of Statistics (KNBS)

August – October 2019

Supervised 60+ team members for Kenya's first digital census. Achieved 98.7% completion rate, managed technical operations, and ensured data quality compliance.

Quality Assurance Engineer

Kenya National Bureau of Statistics (KNBS)

June – August 2019

Conducted comprehensive testing on census CAPI system. Documented 34 issues, developed testing protocols, and prepared technical reports for system deployment.

Electrical Engineering Intern

Octrinsic Technologies & Kenya Power (KPLC)

2014

Gained hands-on experience in PCB design, electrical systems maintenance, power distribution, and CAD software applications.

Education

MSc. Software Engineering

JKUAT, Kenya

2021 – 2024

BSc. Electrical & Electronic Engineering

JKUAT, Kenya

2012 – 2016

Certified Public Accountant (CPA 1-4)

Strathmore University

2011 – 2012

Certifications



Member, Engineers Board of Kenya (EBK) – 2020



Data Science Certification – 2020



Adobe Creative Suite Certification – 2020



Python Programming Certification – 2020

Let's Connect

I'm open to new opportunities and collaborations. Feel free to reach out!



Email Me



Call Me

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