

# Moffat Kagiri Ngugi

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## Education

**University of East London — London, UK | Master of Science in Data Science — In Progress**

**Daystar University — Nairobi, KE | Bachelor of Science in Actuarial Science — 2021**

## Experience

**Liberty & Heritage Insurance — Nairobi, KE**

*Actuarial Graduate Trainee — April 2025 – Present*

- Conduct lapse, portfolio, and experience analysis to support risk monitoring, underwriting review, and pricing discussions across general and life businesses
- Developed a structured lapse analysis reporting framework for the Risk & Compliance function, simplifying the monthly risk reporting cycle and reducing reliance on fragmented Excel packs
- Support actuarial reporting and analysis in line with internal risk governance and regulatory reporting requirements across underwriting, finance, and compliance functions
- Support portfolio mix and movement analysis in collaboration with the Investments and Finance teams, contributing to improved visibility over asset and liability dynamics
- Apply claims experience metrics and loss ratio analysis to inform underwriting decisions and renewal reviews
- Work directly with underwriters, actuaries, business development, and finance managers to translate actuarial insights into operational and commercial decision-making

**KCB Bank Kenya — Nanyuki, KE**

*Personal Banker — September 2022 – April 2025*

- Analysed loan progress and customer transaction reports to identify high-performing individuals and schemes, supporting targeted loan origination and portfolio growth
- Drove adoption of mobile and digital banking channels across transactional and current accounts, supporting channel migration and reducing in-branch transaction volumes
- Designed and executed monthly SMS reactivation campaigns targeting dormant accounts, improving account activity, customer persistence, and fee-based income
- Maintained consistently high productivity across monthly performance cycles, with digital banking connections accounting for a significant share of individual output

**KCB Investment Bank — Nairobi, KE**

*Investment Banking Operations Training (Secondment)*

- Completed structured exposure to investment banking operations, including securities processing, reconciliations, settlements, and client reporting
- Supported delivery of capital markets products to retail and SME clients through the branch network, including equity brokerage, Treasury bills and bonds
- Gained working understanding of money market fund operations, statement processing, and investment servicing workflows

- Strengthened practical knowledge of regulated financial instruments and end-to-end investment product lifecycles

## Projects

### Mortality Investigation

*Actuarial Science / R*

- Built an R-based mortality investigation to estimate crude and graduated mortality rates and perform actual vs expected analysis
- Calculated central exposed-to-risk using both exact individual exposure and census approximation methods, with force of mortality estimation
- Implemented time-aware age calculations (last birthday convention) and diagnostic checks to validate assumptions

*Tools: R (tidyverse, lubridate, demography) | Reference: Bowers et al., Actuarial Mathematics*

### Medical Providers Panel – Spatial Coverage Analysis

*Health Analytics / Python*

- Developed a geospatial workflow to clean, geocode, and map a national medical providers panel with explicit confidence tiers
- Integrated population data to compute county-level provider-to-population coverage metrics for health planning and reporting
- Produced reproducible outputs including interactive maps and structured coverage summaries

*Tools: Python (pandas, geopandas, rasterio, folium), OpenStreetMap, WorldPop*

### Fedha — Personal & SME Finance Tracker (*Ongoing*)

*Applied Analytics & Product Development*

- Developing a financial insights platform for SMEs focused on tax estimation, invoicing, and compliance-oriented reporting
- Translating small business financial data into structured summaries to support cashflow visibility and decision-making

## Certifications & Professional Development

### Professional Certifications

- **Financial Modelling & Valuation Analyst (FMVA)** — Corporate Finance Institute (CFI)

### Professional Standing

- **Affiliate Member**, Society of Actuaries (SOA)
- **Working toward Associate of the Society of Actuaries (ASA) designation**

### Additional Training

- **Agile Principles & Methodologies Certification** — KCB Bank Kenya

## **Skills**

**Actuarial & Insurance Analysis:** Experience analysis (mortality, lapse, claims), loss ratio analysis, pricing and underwriting support, A/E analysis, portfolio monitoring, risk reporting

**Financial & Commercial Analysis:** Portfolio mix and movement analysis, balance sheet awareness, performance-linked KPI analysis, public sector tender analysis

**Data & Analytical Tools:** R, Python, SQL, Excel (Advanced), Power BI

**Working Environment:** Cross-functional collaboration in regulated financial institutions, documentation and audit-ready reporting, Agile principles