MALAMBO MUTILA

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PROFESSIONAL SUMMARY

Malambo Mutila is a Full-Stack Data Scientist with a Master's degree in Computer Science, a Bachelor's Degree in Mathematics and over five (5) years of experience collecting, analysing and managing data. Demonstrated experience includes data analysis using Python, SPSS and STATA, data visualization using Tableau, relational database management using MySQL and PostgreSQL, full-stack web development using HTML, CSS, JavaScript, PHP and Python, and survey data management using XLSForms, SurveyCTO, KoboToolBox, and ODK.

WORK EXPERIENCE

Empowerment and Resilience Network (EaRN) - Lusaka, Lusaka, Zambia

July 2023 – Present

Full-Stack Data Scientist & Information Manager (Remote | Part-time)

- Database schema design and development for ETL processes and data warehousing.
- Collaborating with teams under the Research, M&E and Strategic Planning departments to review ICT-based proposals, ensuring they meet Smart Zambia's data security and privacy standards.
- Designed and developed a project website and handled all the hosting configuration including custom DNS setup and domain emails. | View website here.
- Developed a Tableau dashboard summarising the 2023-2024 cholera outbreak in Zambia. | View dashboard here.

Zambia National Public Health Institute - Lusaka, Lusaka, Zambia

July 2022 - July 2023

Public Health Analyst /Global Health Corps (GHC) Fellow

- Collaborated on the development of two research protocols and four research manuscripts for publication.
- Developed a new manuscript management system for ZNPHI's "The Health Press." | View here.
- Managed COVID-19 data and developed an interactive COVID-19 dashboard for the ZNPHI website.
- Collaborated with the IT Specialist to recommend the acquisition, installation and maintenance of backup servers, laptops, internet and other ICT infrastructure.
- Consulted other scientists and researchers from the PHEOC, Surveillance, SPIM, and EPR to analyse routine surveillance data.
- Liaised with permanent secretaries across four government ministries for the development of the Zambia Multisectoral Pandemic Preparedness and Response Project (ZaMPPR).
- Led and developed 15% of the grant writing for the \$18 million ZaMPPR project funded by World Bank.

Draftslink Ltd. - Lusaka, Lusaka, Zambia

August 2020 – October 2021

Data Analyst (Remote)

- Managed client and employee databases using MySQL and adhering to security and privacy guidelines.
- Quantitative data analysis, data visualization and presentation using Python, Excel and Tableau.
- Used Machine Learning with Python to develop a financial model that increased profits by 35%.

Madesh Investments Ltd. - Kitwe, Copperbelt, Zambia

January 2018 – February 2020

Data Analyst

- Led meetings and presentations with clients and stakeholders.
- Managed data collection, data cleaning, feature engineering, feature selection, cross-validation, and hyperparameter tuning for predictive modelling.
- Utilised SQL to query and manipulate large datasets, ensuring data accuracy and integrity.

PROJECT-BASED RESEARCH EXPERIENCE

Malaria – Climate Study (Falcon Awards, ZNPHI & Climate Justice Foundation)

Lead Research Assistant

17 September 2023 – 23 September 2023

- Supervised and led my research team in qualitative data collection in Lusaka, Copperbelt, North-western, Luapula, and Central province.
- Directly engaged with Provincial and District Health Officers to organise key informant interviews and focus group discussion at rural and urban health facilities.

Rapid Assessment on the Prevalence of Measles in Mushindamo District (ZNPHI and Africa CDC)

Data Manager

11 September 2022 – 17 September 2022

- Developed three questionnaires using Excel XLSForms and KoboToolBox and deployed them to android tablets.
- Led a team of ten research assistants and community mobilisers in organising and conducting key informant interviews and focus group discussions.
- Managed both data collection and transcription of key informant interviews and focus group discussions.
- Led the development of two research manuscripts using the data collected from the study.

Lifetime Consulting - Lusaka, Lusaka, Zambia

<u>Lead Research Assistant</u> (Impact Evaluation of Build it International)

Research Assistant (First Impact Evaluation of Build it International)

Research Assistant (Impact Evaluation of Afya Mzuri)

8 November 2021 – 19 November 2021 22 March 2019 – 29 March 2019 28 January 2019 – 1 February 2019

- Spearheaded training, led research teams and supervised fellow research assistants.
- Used Formyoula to collect qualitative data through key informant interviews, focus group discussions and significant change stories using local languages and English.
- Transcribed key informant interviews, focus group discussions and significant change stories.

Zambia Statistics Agency - Kitwe, Copperbelt, Zambia

November 2020 – December 2020

Research Assistant

- Used ODK to collect data for the Pilot Census from 317 households through door-to-door interviews in Kitwe.
- Observed research ethics and showed commitment to professional integrity and confidentiality.

EDUCATION

• **MSc Computer Science** – ZCAS University

Research: "Predicting Premier League Match Outcomes Using Machine Learning and Conditional Probability."

<u>Project</u>: Oracle data warehouse (schema design, development and ETL implementation | SQL and Python)

<u>Project</u>: OpenStack implementation (one network and control node, two compute nodes and two nova nodes | Ubuntu 22) | Team Project

Project: Comparison of Machine Learning algorithms using WEKA.

• **BSc Mathematics Education** – The Copperbelt University (CBU)

PROFESSIONAL CERTIFICATES

- Google Advanced Data Analytics (Assets: Excel, Tableau, Machine Learning and Python)
- **Applied Data Science** (Assets: Excel, Machine Learning and Python)
- Excel Skills for Business (Assets: Complex calculations, conditional logic, data validation and automation)
- Epidemiology in Public Health (Assets: Collection and analysis of public health surveillance data)