# Ian Mbaya

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## **EDUCATION**

**Grand Valley State University** 

MS. Data Science and Analytics

**Maseno University** 

BSc. Information Technology

Grand Rapids, Michigan, USA

August 2022 - April 2024

Maseno, Kisumu, Kenya

September 2013 - December 2017

## TECHNICAL SKILLS

Programming Languages: Python, R, SAS, SQL

Libraries and Tools: PyTorch, Sklearn, Pandas, Numpy, Tidyverse, Tableau, Power BI, Git

ML Architectures: K-means, KNN, RNN, CNN, Transformers

## **WORK EXPERIENCE**

#### **Database Administrator**

Creston Industrial Sales, Michigan, USA

May 2023 - August 2023

- Product Catalog Management: Spearheaded the review, preparation, and successful integration of comprehensive product catalogs from various vendors into the company's databases.
- Data Maintenance for ERP and E-commerce Platforms: Oversaw the meticulous maintenance of essential data related to tools, costs, and prices, ensuring seamless functionality and reliability of the ERP system and e-commerce platforms.
- Continuous Improvement and Innovation: Continually sought ways to leveraging technology and automation to enhance database management processes and e-commerce performance.

# **Software Quality Assurance Engineer**

Sharelookapp.com, Singapore

May 2019 - July 2022

- Quality Assurance and Testing: Led the development and execution of comprehensive test scripts for both manual and automated testing environments using Python, ensuring the software met rigorous quality standards.
- Data Management: Utilized advanced SQL techniques to extract, transform, and load (ETL) data, facilitating the seamless implementation of Sharelookapp's EdTech solutions.
- Collaborative Software Development Support: Used JIRA and GitHub to support development teams in analyzing
  design specifications and maintaining high software quality throughout the development and implementation
  process.
- Documentation and Reporting: Created detailed documentation and presentations for tracking and reporting software bugs, feature implementations, and testing outcomes.

# **Data Manager**

Kenya Copyright Board, Nairobi, Kenya

December 2017 - November 2018

- Data Migration Leadership: Successfully spearheaded the migration of over 10,000 legacy system records to a new ERP system, ensuring seamless transition and minimal disruption to operations.
- Data Analysis and Aggregation: Utilized Microsoft Excel to conduct thorough data analysis and aggregation, identifying and resolving discrepancies to ensure the accuracy and reliability of copyright records.
- Data Integrity and Reporting: Played a pivotal role in maintaining the integrity and completeness of data throughout the migration process by applying best practices in data management and utilizing Excel's robust functions.

## **PROJECTS**

- K-Nearest Neighbor (KNN), Built a KNN algorithm from scratch using Numpy and Pandas libraries only to predict blinded bird species for citizen science project. GitHub
- Non-Negative Matrix Factorization, Built an NMF algorithm for multi-modal prediction of protein markers (ADT) given gene expression (RNA). GitHub
- Recurrent Neural Network (RNN), Implemented an RNN algorithm using base Python and the Pytorch Library to predict handwritten digits from the MNIST dataset with a 98% accuracy. GitHub
- **Diagonal Integration**, used Pytorch Sklearn libraries to build a model for predictingBuilt an NMF algorithm for predicting given gene expression from protein markers. **GitHub**

# **EXTRACURRICULAR ACTIVITIES**

- Graduate Student Assistant at the Van Andel Global Trade Center October 2023 April 2024
- IT Student Worker at GVSU Surplus Store November 2022 April 2023