RUMBIDZAI M GWINJI

CONTACT

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📍 302 Ard Na Lea Close, Glen Lorne

🌐 LinkedIn | GitHub

SKILLS

Programming | Python, CUDA, HTML, CSS, Javascript

Tools and IDE | GitHub, Git, Power BI

Soft Skills | Analytical and Critical Thinking, Team Collaboration, Problem Solving, Communication, Time Management, Leadership

Databases | Oracle, MySQL

EDUCATION

STELLENBOSCH UNIVERSITY

Msc Mathematical Sciences, Artificial Intelligence

Research under African Institute for Mathematical Sciences

DISTINCTION

UNIVERSITY OF ZIMBABWE

BSc Honours in Computer Engineering

FIRST CLASS PASS WITH UNIVERSITY OF ZIMBABWE BOOK PRIZE

PROFILE

A motivated Artificial Intelligence (MSc) graduate with a strong passion for technology, data science and analytics. I was awarded a Google Deepmind scholarship and pursued this masters at Stellenbosch University, conducting research at the African Institute for Mathematical Sciences (AIMS South Africa) . My research focused on applying deep learning algorithms for disease modelling in low-resource settings. I am experienced in both technical environments and client-facing roles, I thrive in dynamic, collaborative settings.

WORK AND TECHNICAL EXPERIENCE

Data Analytics Intern – (Remote)

DataVerse Africa   Jul 2025 - to date

- Conducting data-driven research and analysis on trade and customs trends, cleaning and organizing large datasets for insights.
- Utilizing Excel, Power BI, and Python to generate reports and visualizations, improving data interpretation for stakeholders

Technology & Innovation Fellow

Huawei Technologies   2023- 2024

- Led the "Tech4Good" Agri-Connect solution empowering rural farmers with tech-based access to market and information.
- Worked on applied AI projects including agricultural digital tools, cloud-based data systems, and AI for community development.
- Participated in hands-on training on Cybersecurity, Digital Power, and Cloud AI infrastructures.

Computer Engineering Intern

FBC Holdings Limited   2022-2023

- Supported IT service operations, responding to user issues and maintaining core banking systems.
- Assisted in developing internal programs to improve service workflows and reduce manual processes.
- Maintained databases, wrote SQL scripts for reporting and ensured data integrity across systems.
- Contributed to mobile banking application testing and user experience refinement.
- Worked with Oracle databases, handling schema updates, queries and performance checks.
- Performed daily system health checks, ensuring uptime of banking platforms and ATMs.
- Attended periodic staff trainings on cybersecurity, new software tools and IT policies.
- Assisted with procurement and configuration of laptops, desktops and other peripheral devices.
- Participated in IT operations including user account setup, hardware support and troubleshooting

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ACHIEVEMENTS

- Google DeepMind Scholarship for an AI for Science Masters
- Rhodes Scholarship Finalist
- Nestle Scholarship for a Mini MBA for young women designed by Harvard leaders with Girls With Impact Academy Program
- Best Research Thesis
- Book Prize awarded for Best Graduating student in the Computer Engineering Class
- Computer Society of Zimbabwe Award for best graduating student

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CERTIFICATIONS

- Internet of Things - Cisco
- Data Science - IBM
- Cybersecurity - Huawei
- Python for ML and Data Science - Udemy
- Data Science and ML with R | Ongoing

REFERENCES

Prof Ulrich Paquet
Director | AIMS South Africa
ulrich@aims.ac.za

Peter Worsnop
Supervisor | University of Zimbabwe
pworsnop@ceic.uz.ac.za

Kudakwashe Nzara
Supervisor | Huawei technologies
kudakwashe.nzara@huawei.com

PROJECTS

- **Master's Thesis – Deep Learning for Disease Modelling**
Comparative analysis of deep learning models and traditional statistical methods for modelling the spatial distribution of mosquito vectors responsible for Dengue and Chikungunya. The study involves applying and comparing techniques such as Kriging, Kernel Density Estimation (KDE), and Neural Density Estimators to produce predictive vector distribution models across Africa.
Python, GeoPandas, NumPy, Matplotlib

- **AI for Public Health**
Achieved third place in a public health competition focused on predicting missing malaria and diarrhea cases among children in Mozambique. Our best-performing solution was an ensemble model combining XGBoost, SARIMAX and cubic interpolation techniques.
Github | *Python, Pandas, Keras*

- **Modelling Log-Gaussian Cox Processes for Disease Prediction**
Modelled spatial point patterns using probabilistic programming with NumPyro to simulate disease incidence. Used Bayesian inference for uncertainty estimation.
Github | *NumPyro, PyMC, Seaborn*

- **Alternating Least Squares for Movie Recommendation**
Built a recommender system using collaborative filtering and matrix factorization. Evaluated performance with RMSE and implemented bias-only and latent factor models.
Github | *Scikit-learn, Pandas, Numpy, Python*

- **BioAcoustics Classification using Deep Learning**
Designed a convolutional neural network (CNN) to classify animal species based on acoustic recordings. Preprocessed spectrograms and optimized model precision.
Github | *TensorFlow, Librosa, Matplotlib*

- **kNN-Based Agricultural Growth Prediction and Optimization**
Developed a k-Nearest Neighbors model to predict tomato plant growth from soil and weather data. Implemented an optimization layer for fertilizer recommendation.
Github | *Python, Streamlit*

- **Inventory Management System (C#)**
Designed a stock-taking and audit-trail system with user roles and report generation capabilities.

- **Online Tendering System (Internship Project)**
Developed a secure and user-friendly bidding system supporting procurement operations.

- **Tech4Good Project – Huawei Seeds for the Future**
Agri-Connect Platform (Team Lead) : Built a digital agriculture platform providing market access, crop advisory, and trading tools for farmers using web technologies. Integrated farmer-friendly UI and scalable backend.