

# Unarine Timothy Tshimauswu

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## PROFESSIONAL SUMMARY

Data Analyst with experience in Python, SQL, SAS, and Power BI. Skilled in building automated ETL pipelines, analyzing large datasets, and developing predictive models and dashboards that support financial reporting, operational efficiency, and business decision-making. Delivered complete analytics projects, including credit-default modeling, customer segmentation, funnel analysis, and NGO reporting automation. Strong foundation in machine learning, cloud tools, and statistical modeling through a Postgraduate Diploma in Data Science. Known for structured problem-solving, accuracy, and consistent delivery across finance, NGO, and engineering environments. I take pride in being proactive and results-oriented, excelling both independently and as part of a team. With a unique combination of technical skills and business acumen, I am eager to contribute to impactful projects that drive business growth.

## SKILLS SUMMARY

**Programming & Querying:** Python, SQL, R, SAS

**Machine Learning:** Classification Models, Feature Engineering, Model Evaluation, XGBoost, scikit-learn

**Data Engineering:** ETL Automation, Power Query, Data Pipelines, API Integration

**BI & Visualization:** Power BI, DAX, Tableau, Excel Modelling, Data Modelling

**Cloud & Databases:** SQL Server, SAP, Azure, AWS, Databricks

**Soft Skills:** Problem Solving, Analytical Thinking, Collaboration, Stakeholder Engagement

## WORK EXPERIENCE

### Data Analyst | Ruach Consulting Solutions | Pretoria, Gauteng

Dec 2024-Present

- Built automated SQL and Power Query reporting pipelines, improving data accuracy and reducing manual work by 40-50%.
- Designed Power BI dashboards for cash flow, donor performance, and spending patterns for NGOs with R3M+ annual revenue.
- Delivered financial and operational analytics using Python, SQL, and SAS for structured reporting and forecasting.
- Improved organizational decision-making by developing ETL workflows and integrated reporting systems.

### Process Engineer | Arcelor Mittal South Africa | Gauteng

Mar 2022-Nov 2024

- Used SQL and Power BI to analyze production data, achieving a 10% cost reduction through efficiency improvements.
- Applied statistical modelling and data analysis to identify failure patterns and implement solutions that reduced downtime by 10%.
- Developed a real-time production reporting system integrating SQL databases with web dashboards.
- Built optimization models analyzing energy usage, product mix, and furnace configuration to identify cost-saving opportunities.

### Engineer in Training | Arcelor Mittal South Africa | Gauteng

Mar 2022-Nov 2024

- Analyzed production datasets to identify optimization opportunities that increased throughput by 8%.
- Supported quality analytics initiatives resulting in a 12% reduction in waste.
- Delivered optimization projects producing R38 million in mechanical-loss savings.

# PROJECTS

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1. Credit Default Risk Management System| [LINK](#) 2025  
*Python, SQL, SAS, XGBoost, Power BI, FastAPI, Streamlit, AWS, Banking*
- Modelled 1M+ loan applications to predict probability of default.
  - Benchmarked multiple models and selected tuned XGBoost with strong precision to reduce false approvals.
  - Built a full scoring pipeline with FastAPI and Streamlit for real-time lending decisions.
  - Designed Power BI dashboards highlighting risk segments and approval-quality trends.
  - Impact: Supports safer credit decisions, reduces lending risk, and speeds up assessment workflows.
2. NGO Financial Transparency & Reporting Automation| [LINK](#) 2024  
*Excel, Power Query, SQL, Power BI, Azure Data Factory, Databricks, Financial Accounting*
- Built an automated ETL system integrating SQL sources for financial reporting.
  - Developed dashboards for cash flow, donor funding, and expenditure analysis.
  - Impact: Improved reporting accuracy and reduced manual preparation time by 50%.
3. Customer Segmentation & Marketing Personalization Engine| [LINK](#) 2025  
*Python, SQL, PCA, K-means, Decision Tree, Streamlit, Customer Analytics*
- Analyzed customer behaviour, income bands, and spending patterns to create financial behaviour clusters.
  - Built PCA + K-Means pipeline to segment customers for tailored product offerings.
  - Developed a Streamlit app for scoring new customers.
  - Impact: Enables targeted marketing and improves cross-sell accuracy.
4. E-Commerce Funnel Analysis & Conversion Insights| [LINK](#) 2025  
*Python, SQL, Tableau, SaaS Analytics, Consumer Analytics*
- Analyzed login, session, and order-stage data to identify conversion drop-offs.
  - Built Python scripts and SQL queries to quantify friction points.
  - Created Power BI dashboards showing blockers and user-behaviour gaps.
  - Impact: Guided UI improvements that increased user interaction and reduced revenue leakage.
5. ArcelorMittal Production Data Engineering Pipeline | [LINK](#) 2024  
*Python, Microsoft SQL, Power BI, Time-series Analysis, Process Engineering*
- Analyzed production and downtime datasets to isolate operational bottlenecks.
  - Built Power BI dashboards and ran statistical root-cause analysis of mechanical losses.
  - Impact: Achieved 8% throughput increase and 5% reduction in unplanned downtime.

# EDUCATION

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- University of Witwatersrand | Gauteng 2025  
*Post Graduate Diploma: Data Science (Cum Laude)*
- Major: Machine Learning, Programming, Mathematical & Statistics for Data Science
- University of Pretoria | Gauteng 2023  
*BENG (Hons): Industrial and Systems Engineering*
- Major: Enterprise Engineering, Manufacturing Planning and Control, Optimization, Supply Chain Processes and Design
- University of Pretoria | Gauteng 2016-2019  
*BENG: Metallurgical Engineering and Materials Science*
- Major: Process Control, Python Programming, Extractive Metallurgy, Material Science

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References upon request