

UNARINE TIMOTHY TSHIMAUSWU

Senior Data Analyst

Gauteng, South Africa | 082 580 4035 | timothytshimauswu@gmail.com | LinkedIn: [utshimauswu](https://www.linkedin.com/in/utshimauswu/) | Portfolio: [TimothyTshimauswu](https://www.timothytshimauswu.com)

PROFESSIONAL SUMMARY

Data Scientist with 5 years of experience operating at the intersection of commercial decision-making and machine-learning implementation. Proven ability to partner with cross-functional stakeholders to translate customer, financial, and operational problems into predictive models, decision frameworks, and actionable insights. Experienced across the full analytics lifecycle, from problem framing and feature engineering to model evaluation, deployment, and executive communication. Delivered R83M+ in quantified business impact across financial services, industrial operations, and consulting environments.

CORE CAPABILITIES

Decision & Commercial Analytics: Customer retention, portfolio performance, risk indicators, cost leakage analysis, pricing, and optimisation support

Programming & Analytics: Python, SQL, R, Power BI (DAX), Tableau, Advanced Excel

Data Engineering & Cloud: Azure Data Factory, SQL Server, Databricks, AWS (EC2, S3), Docker, ETL pipelines, FAST API

Stakeholder & Decision Support: Executive reporting, model interpretation, business translation, cross-functional collaboration

PROFESSIONAL EXPERIENCE

Financial Data Analyst

Ruach Consulting Solutions (Consulting for NGO Client)

December 2024 – Present

- Partner with finance and compliance stakeholders to translate reporting, control, and funding questions into data-driven decision support.
- Designed SQL-based data models and Power Query pipelines processing 50,000+ monthly transactions, improving transparency and audit readiness.
- Built automated reporting workflows using Azure Data Factory and Power BI, reducing reporting effort from 40 to 20 hours per month and accelerating decision cycles.
- Performed variance and anomaly analysis across R4.5M expenditure portfolios, identifying R150K in projected annual savings.

Process Engineer (Applied Operations Data Scientist)

ArcelorMittal South Africa,

March 2022 – November 2024

- Acted as the analytics bridge between operations, finance, and management, translating performance and cost questions into data-backed insights.
- Designed Azure-based ETL pipelines processing 250,000+ monthly records across a 504,000-tonne/year operation, improving data reliability and accessibility.
- Built Python- and SQL-based analytical models to support performance monitoring, root-cause analysis, and decision support.
- Analysed 80,000+ operational events, identifying structural inefficiencies that improved throughput by 8%, reduced downtime by 5%, and delivered R38M in operating profit.
- Conducted time-series and anomaly analysis on five years of customer complaint data, informing targeted interventions and preserving a R30M+ customer account.

- Developed regression-based energy optimisation models for a 1.8M-tonne/year plant, delivering R15M in annual cost savings.

Graduate Engineer (Analytics & Process Control)

ArcelorMittal South Africa

March 2020 – February 2022

- Applied statistical analysis to 50,000+ equipment and process records, improving stability and control across critical processes.
- Delivered R15M in mechanical-loss savings through structured data analysis and performance monitoring.
- Designed an end-to-end defect and quality analytics framework using SQL and Excel, reducing end-product defects by 10%.

SELECTED ANALYTICS PROJECTS

Credit Default Risk Analytics Platform | Portfolio Project | [GitHub](#)

Python, SQL, SAS, XGBoost, FastAPI, Streamlit, AWS

- Built a production-ready credit risk scoring platform analysing 1M+ loan applications, translating borrower behaviour into default risk indicators.
- Engineered 45 predictive features and achieved 87% precision and 82% recall, balancing predictive power with business interpretability.
- Deployed a containerised FastAPI scoring service on AWS EC2, projecting a 15% reduction in bad debt through improved decision support.

Production Analytics & Azure Data Pipeline | Industrial Case Study | [GitHub](#)

Python, Azure Data Factory, SQL Server, Power BI

- Designed scalable ETL pipelines processing 250,000+ monthly records to support performance and cost analytics.
- Delivered decision insights through bottleneck and Pareto analysis, contributing R38M in operating profit and a 5% capacity increase.

Customer Segmentation & Campaign Optimisation | Portfolio Project | [GitHub](#)

Python, Pandas, Scikit-learn

- Conducted behavioural segmentation on 1,843 customers using transactional and engagement features.
- Identified 8.8x variance in campaign response rates across segments.
- Proposed targeted engagement strategies projecting 3.4x campaign acceptance improvement and 71% cost reduction.

Call Centre Performance & Operational Analytics | Portfolio Project | [Tableau Public](#)

SQL, Tableau, Excel

- Analysed 5,000+ call centre interactions across eight operational KPIs.
- Built interactive dashboards enabling time-based and agent-level performance monitoring.
- Identified staffing and efficiency gaps supporting R1.5M in projected annual savings.

EDUCATION

Postgraduate Diploma in Data Science (Cum Laude) | University of the Witwatersrand, 2025

BEng (Hons) Industrial & Systems Engineering | University of Pretoria, 2023

BEng Metallurgical Engineering | University of Pretoria, 2019

References: available upon request