

# SBUSISO MDINGI

## Actuarial & Data Analyst

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### ABOUT ME

Analytical professional with strong actuarial foundations and hands on experience building data driven tools. I specialise in transforming raw data into statistical models, automated workflows, and interactive dashboards that support clear decision-making. My work integrates rigorous quantitative methods with practical execution, enabling clients and stakeholders to solve problems with clarity and confidence.

### EDUCATION

**UNIVERSITY OF FREE STATE** **2026-CURRENT**  
BSc. (Hons) majoring in Risk Analysis

**UNIVERSITY OF FREE STATE** **2022-2025**  
BSc. majoring in Actuarial Science

### WORK EXPERIENCE

**AIM Vacation Work Programme – Actuarial Pricing Project** **2026-2026**

- Priced a funeral rider product using benchmark rates, incorporating risk factors (age, sex, smoking status, occupation) and product features such as suicide waiting periods
- Performed profit testing and benchmarked results against market products to assess profitability and competitiveness
- Developed a pricing interface and presented methodology and results to cross-team stakeholders

**University of Free State – Student Assistant** **2023-2023**

- Assisted in delivering Computer Literacy practical sessions for 50+ undergraduate students
- Guided learners through Excel, Word, and PowerPoint tasks to support academic requirements and applied problem solving
- Provided troubleshooting support for system issues and software related queries during 3-6 hour lab sessions

### PROJECTS

#### PORTFOLIO OPTIMISATION & RISK ANALYTICS DASHBOARD

(Quantitative Finance · Risk Management · R Shiny · Yahoo API)

- Developed an Interactive Portfolio Optimiser that uses Monte Carlo simulations to identify risk-adjusted investment strategies for JSE-listed stocks
- Built predictive stress-testing tools to model portfolio behaviour under extreme market volatility and economic shocks
- Integrated real-time financial data feeds to provide live performance tracking and benchmarking

#### HEALTH INSURANCE PREMIUM PRICING MODEL

(Actuarial Pricing · Statistics · R Shiny · GLMs)

- Developed a Health Insurance Pricing Model that utilises frequency-severity modelling to ensure fair, risk-based premium allocation.
- Automated the calculation of Risk-Adjusted Premiums by integrating demographic rating factors into a statistical framework.
- Designed a visual analytical tool to demonstrate how lifestyle factors (e.g., BMI, tobacco use) directly correlate with insurance liability.

### SKILL

#### PROFESSIONAL:

- Project planning & execution
- Stakeholder communication
- Client focused problem solving
- Data storytelling & visualisation

#### TECHNICAL:

- **Data Analysis:** Data cleaning, validation, transformation
- **Statistical Modelling:** Regression, forecasting
- **Programming:** R, Python, VBA