

# MZUKISI SOCI

Surveillance Analyst

## CONTACT

Johannesburg, South Africa

(076) 328-4440

mzu.soci@gmail.com

[LinkedIn Profile](#)

[Github Profile](#)

## TECHNICAL SKILLS

- Python Programming
- OOP
- SQL
- Git
- Github
- NumPy
- Database
- Pandas
- Scikit-Learn
- HTML
- CSS
- MS Office

## SOFT SKILLS

- Collaboration
- Strong Problem-Solving Skills
- Attention to Detail
- Lean Principles in Product Design
- Communication
- Analytical Skills
- Troubleshooting issues
- Efficiency

## EDUCATION

**Data Science Bootcamp**

**HyperionDev**

06/2023 - 12/2023

**Diploma in Information Mgmt**

**Damelin**

01/2001- 12/2005

## PROFESSIONAL SUMMARY

Seasoned Market Abuse Analyst with over 5 years of experience in market surveillance, regulatory compliance, and technology-driven process enhancements. Expert in monitoring trading activities across asset classes, detecting market abuse, and ensuring adherence to industry standards. Experienced in collaborating with key regulatory bodies like the JSE, Reserve Bank of South Africa, and STRATE to resolve data processing and technology-related issues. Proficient in Python, SQL, and advanced data analysis techniques, with a strong background in setting up ETL processes for trade and communication surveillance systems.

## PROFESSIONAL EXPERIENCE

**Market Abuse Analyst | ABSA CIB**

01/2018 - present

- Ensured accurate and timely uploads of trade data across equities, derivatives, and bonds by supporting and monitoring data pipelines.
- Investigated and troubleshooted issues related to data uploads, collaborating with compliance teams to resolve discrepancies and maintain data integrity.
- Coded and implemented automation solutions to streamline the trade data upload process, reducing manual intervention and enhancing overall efficiency.
- Collaborated closely with front-office teams to review and optimize market abuse alerts, ensuring real-time detection and resolution of suspicious trading activities.
- Prepared and presented findings at monthly market abuse meetings, contributing to strategic decision-making and compliance improvements.

**Junior Solution Developer | ABSA CIB**

01/2016 - 12/2017

- Engaged with the JSE on deploying updates of Futures Clearance applications such as GCMS and Avvento, ensuring seamless integration and functionality across market classes.
- Set up ETL processes to extract trade data from the JSE and integrate it into Clarity Surveillance, enhancing the bank's ability to monitor and analyze trading activities.
- Led the transition from Clarity Surveillance to SMARTS by establishing new ETL processes, ensuring uninterrupted trade surveillance and compliance.
- Collaborated with Bloomberg Vault to establish ETL processes for communication surveillance, bolstering the bank's compliance framework.

**Application Support Analyst | ABSA CIB**

10/2012 - 12/2015

- Engaged with the JSE, Reserve Bank of South Africa, and STRATE on various occasions to resolve data flows and processing issues, ensuring efficient and accurate data handling.
- Provided expert support for production systems, resolving incidents promptly to ensure uninterrupted operations.
- Conducted rigorous testing and post-implementation evaluations for system changes, ensuring high-quality releases and operational resilience.
- Documented and streamlined support processes, contributing to improved efficiency and reduced response times.

## SELF-STUDY

### UDEMY

08/2023

Executive Briefing: Artificial Intelligence (AI) + ChatGPT

### UDEMY

08/2023

The Complete Foundation FOREX Trading Course

### UDEMY

05/2019

Forex MetaTrader 4: Master MT4 Like A Pro Forex Trader

### UDEMY

05/2019

Forex Trading A-Z™ - With LIVE Examples of Forex Trading

## REFERENCES

References available on request

## TECHNICAL EXPERIENCE

### Data Science Bootcamp | HyperionDev

06/2023 - 12/2023

The Data Science bootcamp covers Python, probability, statistics, data science libraries and fundamental machine learning concepts.

- Achieved an overall grade average of 99% for the bootcamp tasks.
- Completed three Jupyter Notebook capstone projects, utilizing Python, data cleaning, and basic ML to solve real-world data science challenges, showcasing practical proficiency and problem-solving skills.
- Utilized Tableau to create visualizations, improving data presentation and interpretation, effectively communicating insights to stakeholders.
- Acquired expertise in supervised, unsupervised ML techniques, and NLP, enhancing capabilities in advanced data analysis essential for diverse data science projects.

## PROJECTS

### Capstone Project Linear Regression in Action

- Analyzed boston.csv in Jupyter at Hyperion Dev bootcamp. Cleaned data, used rm and lstat for linear regression. Split, built model, evaluated MSE/RMSE, plotted errors, interpreted coefficients, and summarized findings in Capstone Linear Regression.ipynb. [Link](#).

### Capstone Project Task Manager

- During Hyperion Dev bootcamp, I developed a task management system for a small business. Users logged in, managed tasks, and maintained a user-friendly interface. Data was stored in user.txt and tasks.txt files. [Link](#).

### Supervised Learning - Random Forests

- Expanded Decision\_Trees.ipynb project at Hyperion Dev bootcamp to include Bagged, Random Forest, and Boosted tree models for the titanic dataset. Identified key predictive feature in Random Forest. Tuned parameters and evaluated model accuracies to determine the best performing model with optimized settings. [Link](#).

### Natural Language Processing

- Developed garden.py project at Hyperion Dev bootcamp. Explored garden path sentences, identified examples, and stored them in gardenpathSentences list. Tokenized and performed named entity recognition using spaCy. Analyzed spaCy categorization and explanations for entities. Documented findings on two entities for clarity and relevance [Link](#).

## ACCOMPLISHMENTS

- Attained mastery in essential Python programming objectives, including data structures, loops, and functions, laying a solid foundation for advanced data manipulation and analysis.
- Acquired hands-on experience in cleaning and preparing datasets for analysis, utilizing techniques such as handling missing values, removing duplicates, and standardizing data formats, ensuring data quality and integrity.
- Developed a foundational understanding of basic machine learning algorithms and artificial intelligence concepts, enabling the exploration and implementation of predictive models for data-driven insights and decision-making.