

Tsepo Matheleli

Data Analyst | Python Developer

Data systems developer with 3+ years building scalable, client-facing systems, leading teams, and designing full-stack data solutions using AWS, APIs and BI tools.

Edenvale,
Johannesburg
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EXPERIENCE

ADEI, Johannesburg — Python Developer

November 2022 - PRESENT

Billing Automation Project

- Developed an automated billing system, reducing processing time from 12 hours (720 minutes) to ~45 minutes through optimized code and API-based microservices.
- Designed scalable APIs to streamline functionality, enabling junior developers to contribute effectively to Twilio-related projects.

WhatsApp Bot Engine

- Rebuilt the WhatsApp bot architecture from multiple standalone scripts into a unified, scalable engine, improving maintainability and onboarding speed.
- Standardized debugging and support workflows, reducing resource strain on developers.

Additional Information

- Experienced in mentoring junior developers and leading technical discussions, including peer programming sessions.
- Collaborated with cross-functional teams to align business needs with technical solutions, ensuring the development of impactful tools.
- Acted as a key stakeholder, driving innovation and process improvements that enhanced system performance and usability.
- Collaborated
- Contributed to the redesign of legacy database systems by leveraging data lakes and data warehouses, significantly improving data architecture and scalability.
- Reviewed and designed Power BI projects to increase the impact, clarity, and resourcefulness of reporting solutions, enabling more informed business decisions.

SKILLS

Programming:

Python (Django, Flask, FastAPI), SQLAlchemy, Pandas, Numpy, Unittest (Test Driven Development)

Business Intelligence:

Tableau, Streamlit, Power BI

Data Analysis:

Descriptive Statistics, Data Analysis

Database:

SQL, PostgreSQL, NoSQL (MongoDB), AWS RDS

Infrastructure:

On-prem (Local hosted server), AWS EC2, Redis, Docker

Other:

Project Management, Git, CI/CD, Linux Bash, Stakeholder Communication, Microsoft Office, Automation, API Development, ChatGPT

LANGUAGES

English - Full Professional Proficiency

Sesotho- Full Professional

Side Project — Car Rental Management System

September 2024 - February 2025

- Designed and built an MVP for fleet management and logistics tracking using Flask, Streamlit.
- Integrated a WhatsApp bot for daily operational requirements , reducing over 90% of manual labour of daily tasks.
- Hosted system on AWS EC2 and RDS, handling user management & data storage.

Side Project — Productivity Management System (AI Powered Task Automation)

July 2023 - September 2023

- Developed a task management platform using ChatGPT for intelligent task breakdown and project planning.
- Implemented natural language processing (NLP) to convert user descriptions into structured tasks.
- Built on Azure infrastructure with Django (backend APIs) and React (frontend).

2U, Cape Town — Data Science Intern

March 2022 - October 2022

- Conducted data analysis to extract insights on student behavior, identifying trends and patterns that informed key business decisions.
- Performed sentiment analysis on student feedback using NLTK, providing valuable insights for course improvement and marketing strategies.
- Developed a Tableau dashboard to visualize key marketing performance indicators, increasing accessibility of data to stakeholders and enhancing decision-making processes.

UMUZI, Johannesburg — Data Science Recruit

May 2021 - February 2022

- Developed scripts for ID validation, API manipulation, and built machine learning models for various predictions.

EDUCATION

Umuzi, Johannesburg — Information Technology Systems Development

May 2021 - February 2022

Completed N5 In Information Technology: System Development

Central University of Technology, Bloemfontein — *Information Technology: Software Development*

February 2013 - November 2019

Incomplete.

Brebner High School, Bloemfontein — *Matric*

January 2007 - November 2011

Completed Matric

REFERENCES

David Msibi

Chief Technical Officer / SQL Specialist

Available on Request

Kennedy Mbono

Data Scientist/ SQL Specialist

Available on Request

Ngazani Gamede

Junior PHP Developer

Available on Request