

ANELE ASANDA MAPHALALA

Junior Data Scientist

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• <https://github.com/AneleMaphalala> • <https://anelemaphalalaportfolio.netlify.app/>

Summary

An enthusiast driven by a passion for problem-solving, continuous learning, and extracting meaningful insights from data to drive well-informed decision-making and innovation across various industries. Proficient in data wrangling, database management, data visualization using Power BI and Tableau, statistical analysis, machine learning, and deep learning, leveraging languages such as Python, R and SQL. Additionally, adept in test-driven development, software development, and web development using languages such as Java, JavaScript, HTML/CSS.

Skills

Languages: Python • R • SQL • Java • HTML • CSS • JavaScript

Frameworks: Pandas • Numpy • Scikit-Learn • Matplotlib • Pytorch • Tensorflow • Keras

Tools: Power BI • Microsoft Excel • Tableau • Tableau Prep Builder • SQLite • MySQL • Power Query

Platforms: PyCharm • Jupyter Notebook • Visual Studio Code • IntelliJ IDEA • Google Colab • SQL Server Management Studio • RStudio • Streamlit

Soft Skills: Problem Solving • Team Collaboration • Communication • Storytelling • Adaptability • Interpersonal

Experience

Sand Technologies

Data Science Intern

03/2024 - 06/2024

- Contributed to a data science initiative addressing water loss in distribution networks using acoustic loggers.
- Collaborated with domain experts to align technical decisions with business objectives.
- Conducted comprehensive Exploratory Data Analysis to ensure model reliability, identifying false negatives and false positives.
- Implemented rigorous data preprocessing techniques for optimal model training.
- Designed models to classify sound files from acoustic loggers, distinguishing between leak and no-leak conditions with high accuracy.
- Selected, trained, and evaluated PyTorch Convolutional Neural Network model achieving 84% accuracy and TensorFlow/Keras Recurrent Neural Network model achieving 85% accuracy.
- Integrated trained models into a Streamlit application, preprocessing audio files, extracting features, and determining leak presence.

InternCareer

Data Analyst Intern

01/2024 - 02/2024

- Utilized Python for comprehensive data analysis and manipulation, including data cleaning, transformation, and exploration to extract actionable insights.
- Developed and implemented a content-based filtering algorithm of YouTube content creators.
- Significantly enhanced user engagement by delivering personalized recommendations improving viewer satisfaction.
- Developed insightful visualizations using Power BI to facilitate data-driven decision-making and reporting.
- Improved data transparency and accessibility, aiding stakeholders in understanding key trends and metrics.

Education

ExploreAI Academy

National Certificate: Information Technology (Systems Development)

06/2023 - 07/2024

- Data Science

WeThinkCode_

National Certificate: Information Technology (Systems Development)

09/2022 - 12/2023

- Software Engineering

University of KwaZulu-Natal

Bachelor of Medical Science Honours

02/2021 - 12/2021

- Microbiology

University of KwaZulu-Natal

Bachelor of Medical Science

02/2018 - 12/2020

- Physiology

Certifications

SQL: A Practical Introduction for Querying Databases — IBM

Excel for Data Science — Great Learning

Data Analytics using Excel — Great Learning

Multivariate Time Series Forecasting in R — Great Learning

R for Data Science — Great Learning

Data Fundamentals — IBM

Machine Learning Regression in Python — Udemy

Java Intermediate — Sololearn

References

Available upon request.