

Kamohelo Maphela

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Portfolio: kamohelo02.github.io/Software-Engineer-Web-Portfolio/

Professional Summary

Versatile and motivated technology professional with a strong foundation in both software engineering and data engineering. Experienced in cloud platforms including AWS, Oracle Cloud Infrastructure (OCI), Microsoft Azure, Databricks, and Snowflake. Skilled in object-oriented programming, full-stack development, data pipeline construction, ETL processes, cloud-based system design, and data visualization. Certified in OCI Foundations and AWS Cloud Fundamentals. Completed Quantum Software Engineering Job Simulation. Currently pursuing Microsoft Fabric Data Engineer Associate certification to enhance data engineering and cloud solution development in the Microsoft ecosystem.

Education

Bachelor of Science in Information Technology

North-West University | Completed: 2025

Relevant Coursework:

Object-Oriented Programming, System Analysis and Design, Data Analytics, Data Structures and Algorithms, Databases, Web Development, Artificial Intelligence, Decision Support Systems, Operating Systems, IT Development Methodologies

Technical Skills

Programming Languages: Python, Java, C++, C#, SQL, HTML, CSS

Cloud Platforms: Databricks, Amazon Web Services (AWS), Oracle Cloud Infrastructure (OCI), Microsoft Azure, Snowflake

Frameworks & Tools: ASP.NET, .NET Framework, Git, Pandas, NumPy, Matplotlib, Plotly, Dash, pytest, Selenium.

Databases: SQL, Oracle, Database Design, Database Management Systems, Snowflake

Software Development: Full-Stack Development, System Analysis, RESTful APIs, Agile Methodologies, CI/CD

Data Engineering: ETL Processes, Data Pipeline Development, Data Mining, Data Analytics, Data Visualization, Delta Lake, Databricks SQL, Data Transformation, Workflows Orchestration, Medallion Architecture

Systems & IT Development: Operating Systems Concepts, IT Development Lifecycle, System Architecture, Process Management

Certifications

Quantum - Software Engineering Job Simulation

Forage | Issued: February

[2026https://www.theforge.com/completion-certificates/32A6DqtsbF7LbKdcq/jhiG2W9K8KLZK8nXP_32A6DqtsbF7LbKdcq_B5qnja8WvM93j7MWu_1770570556806_completion_certificate.pdf](https://www.theforge.com/completion-certificates/32A6DqtsbF7LbKdcq/jhiG2W9K8KLZK8nXP_32A6DqtsbF7LbKdcq_B5qnja8WvM93j7MWu_1770570556806_completion_certificate.pdf)

Knowledge Badge - Get Started with Databricks for Data Engineering

Databricks | Issued: January

[2026https://credentials.databricks.com/9ca35979-2cc4-4e98-9f1c-3b033db9dc14#acc.NoOr3Bfq](https://credentials.databricks.com/9ca35979-2cc4-4e98-9f1c-3b033db9dc14#acc.NoOr3Bfq)

Oracle Cloud Infrastructure 2025 Certified Foundations Associate

Oracle | Issued: September 2025

[Oracle Cloud Infrastructure 2025 Certified Foundations Associate](#)

AWS Educate Introduction to Cloud 101

Amazon Web Services | Issued: August 2025

[AWS Educate Introduction to Cloud 101 - Training... - Credly](#)

Microsoft Fabric Data Engineer Associate

In Progress

Projects

Hotel Analytics Platform - End-to-End Engineering Project

- Implemented a complete data engineering pipeline for hotel booking analytics using Snowflake as the core data platform.
- Designed and built the pipeline following the medallion architecture pattern (Bronze-Silver-Gold) to transform raw booking data into actionable business insights.
- Developed interactive dashboards answering key business questions.

- GitHub: <https://github.com/Kamohelo02/Hotel-Analytics-Platform--End-to-End-Data-Engineering-Project>

Software Engineering Practices Demo

Personal Project | 2026

- Created a demonstration repository showcasing real-world software engineering workflows and best practices
- Implemented key development practices
- GitHub: <https://github.com/Kamohelo02/software-engineering-practices-demo-2022-summer>

Soul Foods Sales Dashboard & Analytics

Quantum Project | 2026

- Developed ETL pipeline to clean and merge transaction data for Pink Morsels product line.
- Built interactive Dash dashboard with Plotly visualization for sales trend analysis.
- Implemented automated testing using pytest and Selenium for CI/CD readiness.
- GitHub: <https://github.com/Kamohelo02/quantum-starter-repo>

Anti-Money-Laundering (AML) System

Personal Project | 2025

- Developed a batch processing platform to monitor customer transactions for money laundering patterns using Python and SQL.
- Built a scalable backend architecture for transaction analysis and compliance reporting.
- Implemented ETL processes and data mining techniques to identify suspicious transaction patterns.
- Designed a user interface for compliance officers to review flagged transactions.
- GitHub: <https://github.com/Kamohelo02/Anti-Money-Laundering-AML-System>

Healthcare Access Smart Appointment System Backend

Academic Project | 2025

- Created a smart appointment booking system for the NWU Health Centre using Python and RESTful backend architecture.

- Streamlined booking processes by implementing efficient algorithms and optimized data structures.
- Integrated a database management system for patient records and appointment tracking.
- Applied data-driven decision support systems to improve healthcare service coordination.
- GitHub: <https://github.com/Kamohelo02/Healthcare-Access-Smart-Appointment-System-Backend->

Software Engineer Web Portfolio

Personal Project | 2025

- Designed and developed a responsive personal portfolio website using HTML, CSS, and JavaScript.
 - Showcased software engineering and data engineering projects with interactive demonstrations.
 - Implemented clean, maintainable code following web development best practices.
 - Deployed using GitHub Pages for continuous integration.
 - GitHub: <https://github.com/Kamohelo02/Software-Engineer-Web-Portfolio>
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Languages

English (Fluent) | IsiZulu (Fluent) | SeSotho (Fluent)