

Herrings Mkwara

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PROFESSIONAL SUMMARY

Senior Data Analyst and Data Engineer with 10+ years of experience designing end-to-end data solutions across international organizations and public sector environments. Deep expertise in Power BI (PL-300 certified) — including advanced DAX, Row-Level Security (RLS), and executive dashboard development — combined with strong proficiency in Google Cloud Platform (GCP), SQL, and data pipeline engineering. Experienced in translating complex business requirements into impactful reporting solutions, supporting business stakeholders with data-driven insights, and working within Agile product team environments. Proven ability to deliver scalable analytics infrastructure across health, education, and government sectors in multi-country settings.

KEY TECHNICAL SKILLS

Power BI (DAX, RLS, Paginated Reports), Apache Superset, Metabase, Tableau, SQL, Python, Spark, Airflow, dbt, GCP (BigQuery, Looker), Azure (Synapse, Fabric), ClickHouse, MinIO, OpenMetadata, ETL/ELT Pipelines, Data Warehousing, Data Modelling, Business Requirements Gathering, UAT/BAT Testing, Data Validation, Agile/Scrum, Docker, VMware, Nutanix HCI, IT Governance, Data Governance.

EDUCATION

MSc Computer Science: Applied Data Science | *Malmö University – Malmö, Sweden* | Sept 2023 – Jun 2025

Bachelor of Science in Information Technology | *University of Malawi – Malawi* | March 2007 – Nov 2010

CERTIFICATIONS

- Microsoft Certified: Fabric Data Engineer Associate (DP 700) – Microsoft. Oct 2025
- Microsoft Certified: Data Analysis with Power BI (PL-300) – Jun 2025
- Microsoft Certified: Azure AI Fundamentals – Microsoft. Jan 2025
- Advanced Google Data Analytics – Google. Aug 2024
- Google Data Business Intelligence – Google. Dec 2024
- Google Data Analytics – Google. Jul 2023

PROFESSIONAL EXPERIENCE

Technical Advisor – Data Engineer | *Clinton Health Access Initiative (CHAI) – Kigali, Rwanda* | May 2026 – Present

- Design and implement modern health data pipelines ingesting data from DHIS2, EMR, and national health information systems to support Rwanda's National Health Intelligence Center (NHIC) in collaboration with the Ministry of Health.
- Develop and maintain Power BI dashboards and Apache Superset / Metabase reporting solutions providing actionable health intelligence for program monitoring, policy planning, and strategic decision-making.
- Gather and translate business requirements from MoH stakeholders and technical partners into data models, KPI frameworks, and reporting solutions tailored to health program needs.
- Architect a lakehouse-based analytics platform using Airflow, dbt, ClickHouse, MinIO, and OpenMetadata to deliver scalable, reliable health data across staging, intermediate, and analytics layers.
- Implement data governance, metadata management, and Row-Level Security (RLS) controls to ensure data quality, access integrity, and system interoperability across the digital health ecosystem.

Data Centre Cloud Architect Consultant | *Digital Acceleration Project – World Bank / Public Private Partnership Commission – Lilongwe, Malawi* | January 2026 – May 2026

- Architected and managed enterprise data centre and hybrid cloud infrastructure supporting national digital transformation initiatives for all Malawi Government Ministries, Departments and Agencies.
- Designed and implemented Nutanix Hyper-Converged Infrastructure (HCI) environments to improve scalability, performance, and operational resilience.
- Deployed and managed VMware virtualization platforms enabling efficient resource utilization and high availability for enterprise workloads.
- Developed cloud-ready infrastructure supporting data engineering platforms, analytics systems, and government digital services.

Data Management Analyst | *United Nations, Office of Internal Oversight Services – Sweden* | Sept 2024 – Feb 2025

- Designed and implemented end-to-end data pipelines integrating multi-source UN mission data (2M+ records) on GCP, improving data availability by 40% and strengthening evidence-based oversight and accountability.
- Developed and published executive-ready Power BI dashboards with Row-Level Security (RLS) and advanced DAX measures, reducing reporting turnaround from two weeks to three days.

- Gathered business requirements from senior UN stakeholders and translated them into structured data models and reporting solutions, supporting BAT and UAT validation activities prior to deployment.
- Supported business users with data-related questions, insight interpretation, and ongoing report access management across mission teams.

IT & Informatics Manager | *Elizabeth Glaser Pediatrics AIDS Foundation – Lilongwe, Malawi* | Nov 2021 – Aug 2023

- Managed hybrid cloud and on-premise IT infrastructure supporting national health data systems across five regions.
- Designed and deployed a central Azure-based data warehouse, building scalable ETL pipelines integrating multiple health program data sources.
- Developed Power BI dashboards with RLS and DAX-driven KPIs enabling program managers and senior leadership to track health outcomes and make data-driven decisions.
- Implemented automated Electronic Medical Record (EMR) data ingestion pipelines, reducing reporting lag from 30 days to near real-time.
- Collaborated with technical teams and vendors to maintain infrastructure performance supporting 100+ operational and analytics users.

IT Manager | *Research Triangle Institute (RTI) International – Lilongwe, Malawi* | Aug 2017 – Mar 2021

- Managed enterprise IT systems supporting national education data infrastructure serving 9,700+ schools nationwide.
- Developed Power BI and real-time analytics dashboards improving decision-making efficiency for the Ministry of Education, replacing manual Excel-based reporting.
- Implemented automated reporting pipelines and infrastructure supporting large-scale education data processing.
- Introduced Agile collaboration practices across technical teams improving infrastructure delivery and support efficiency by 25%.

Informatics Coordinator | *Population Services International (PSI) – Malawi* | May 2015 – Aug 2017

- Managed centralized data and IT systems integrating health program information from 50+ sites nationwide.
- Designed and maintained SQL-based ETL pipelines and backend data infrastructure supporting operational reporting.
- Implemented data quality controls, metadata documentation, and governance processes to strengthen system reliability.
- Developed Power BI dashboards enabling program managers to track KPIs and improve service delivery performance.

ICT Systems Manager | *Concern Universal – Blantyre, Malawi* | Feb 2012 – Apr 2015

- Managed enterprise IT infrastructure across 10+ regional offices, including servers, networking equipment, and end-user systems.
- Implemented backup, disaster recovery, and IT governance protocols ensuring 99% system uptime.
- Led infrastructure upgrades and migration to more resilient systems, reducing downtime incidents by 40%.
- Oversaw installation, configuration, and maintenance of hardware, operating systems, and enterprise applications.