





Patrick Gichini Waruingi

Data & Analytics Engineer

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 [Patrick Gichini](#)  [Kanataki-zwei](#)

Summary

Experienced **Data Engineer** with over **10 years of expertise** in designing and deploying scalable **ETL/ELT** pipelines, **enterprise data warehouses**, **big data systems**, and **tech data leadership**. Skilled in optimizing cloud costs, integrating machine learning workflows, and leading cross-functional data teams. Proven success at delivering analytics solutions across various industries including **FinTech**, **Healthcare**, **EdTech**, **Manufacturing**, **Social & AdTech**, **Social Enterprise**/NGOs etc.

Skills

Languages & Scripting Python, SQL, R, Bash Flask, FASTAPI, Streamlit, Shiny	Data Pipelines & Warehousing Airflow, Prefect, dbt, Airbyte Google BigQuery, PostgreSQL, Snowflake	Cloud & Infrastructure AWS, GCP
Business Intelligence Self Serve Analytics, Scorecards & KPI Monitoring, Impact Analytics Looker Studio, Power BI, Tableau, Apache Superset	Data Governance Compliance, Security, Data Quality GDPR, ODPC Certification, Great Expectations, DBT Tests	Machine Learning ML OPs, Automations ML Flow, Spark ML

Experience

Educate!

Sr Data Engineer

Nairobi, KE

May 2025 - Present

- Architected and built a central data ecosystem ingesting data from multiple source systems to support operations, reporting, and decision-making across programs in Kenya, Uganda, Tanzania, and Rwanda.
- Designed and implemented an enterprise data warehouse that connects organizational data end-to-end, automates reporting cycles, and reduced the time-to-insight by **30%**.
- Built automated analytical pipelines that removed manual report creation, accelerating dashboard readiness by **40%** and standardizing KPI definitions across teams.
- Deployed a natural-language self-serve analytics tool (dbt MCP + Claude), reducing analyst workload on common queries by **50%** and expanding data access to non-technical stakeholders.
- Implemented automated data quality checks and monitoring, reducing pipeline failures by **25%** and improving overall report reliability and accuracy.
- Leading organization-wide data governance and security initiatives, defining standards, access policies, and best practices for data usage.

Wowzi Technologies Inc

Data Lead & Sr Data Scientist

Nairobi, KE

Oct 2022 - May 2025

- Led a team of 3 technical data professionals (Data Engineers and BI Developer), driving the company’s data strategy and delivery roadmap.
- Acted as interim Data Product Manager for the data and analytics stack, owning roadmap prioritisation, translating business needs into product requirements, and aligning with Product, Engineering, Sales, and Customer Success stakeholders.
- Designed and maintained cloud ELT pipelines processing millions of rows of data from multiple products, marketing, and finance sources.
- Optimised query performance on Google BigQuery, reducing processing time and cloud costs by **30%**.
- Built a machine learning recommendation engine to match clients with the best-performing creators for social media campaigns, improving key campaign success KPIs by **20%**.
- Developed churn prediction models for creators on the platform, enabling the community team to intervene proactively and reduce creator churn by **15%**.
- Designed and built data product services to power in-house product features, including components leveraging generative AI technologies.
- Implemented automated data quality checks and monitoring, reducing pipeline failures by **30%** and improving trust in analytics outputs.
- Built and managed an automated business analytics platform serving C-level, internal, and external stakeholders with near real-time insights.
- Led **SOC 2 Type II** and **GDPR** compliance implementation for data systems, collaborating with engineering, product, and legal teams to meet audit requirements.

Iconia Technologies Ltd

Tech Lead & Sr Data Engineer

Nairobi, KE

Sept 2017 - Aug 2022

- Led end-to-end delivery of data projects for multiple cross-industry clients, acting as both technical lead and project manager from scoping and design through implementation and handover.
- Managed a team of data and software engineers, providing architectural guidance, sprint planning, and code reviews while ensuring projects met technical, timeline, and budget requirements.
- Served as primary technical contact for client managers and C-level stakeholders, translating business requirements into scalable data and analytics solutions.
- Designed and built enterprise data warehouses (cloud and on-premise) for multi-industry clients, enabling advanced analytics and unified reporting.
- Architected and implemented enterprise BI ecosystems (proprietary and open source) for clients in finance, health, manufacturing, education, and retail.
- Built and automated ETL/ELT pipelines for structured and semi-structured data, integrating millions of rows from diverse source systems into centralized analytical stores.
- Developed automated alerting systems via email, Microsoft Teams, in-app chat, and WhatsApp (e.g., stockout alerts), reducing stockouts by **65%** and cutting ad-hoc analyst request workload by **50%** for our manufacturing clients.
- Designed and delivered C-level BI platforms surfacing insights across revenue, targets vs actuals, debt and collections, supply chain and logistics, operational efficiency, and compliance.
- Deployed demand prediction models to optimize inventory management (improving forecasting accuracy to **~85%**) and built customer–product clustering models for banking and fintech clients, driving a **30%** uplift in marketing performance.

Earlier Roles

- Sysadmin & ICT Trainer, Learning Lions, Lodwar Kenya - Sep 2016 - Feb 2017
- Network Eng ^ ICT Trainer, Tunapanda Institute, Nairobi Kenya - Sep 2015 - March 2017
- Roles overlap as these were sister organisations

Projects

Data Infrastructure at Wowzi Technologies

- Designed and built a fully serverless modern data stack from scratch, using Airbyte for multi-source ingestion into Google BigQuery, dbt for transformation, and Prefect for orchestration deployed on AWS ECS.
 - Developed a BI layer with Apache Superset to provide self-serve internal analytics for product, operations, and leadership teams.
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- Airbyte, DBT, Prefect, Apache Superset, Google BigQuery, Quickbooks Source, PostgreSQL Source, Hubspot Source, Google Sheets Source, 3rd party social data APIs

Natural Language Self-Serve Analytics – Educate!

Designed and implemented a natural language self-serve analytics tool using dbt MCP and Claude, enabling non-technical users to query the data warehouse in plain English and receive instant, contextual insights. This reduced analyst workload on common queries by **50%** and gave key decision-makers on-demand access to data, significantly speeding up decision cycles.

dbt MCP, Claude AI

Demand Prediction (Iconia Technologies)

Built a demand prediction solution for a multinational manufacturing client to forecast distributor demand and derive required inventory levels. The system used predicted demand and bill of materials (BOM) data to drive a raw-material procurement module for final SKUs. This improved raw material procurement and production planning efficiency by **85%** and unlocked an additional **~\$1M in MRR** that had previously been lost due to unserviceable backorders.

Multi Linear Regression, Ms Navision for ERP Data, PowerBI, Custom Alerts on Ms Teams

Volunteering

Faraja Cancer Support

Data & Analytics Consultant
Nairobi, Kenya
June 2024 - Present

- Designed and deployed a Streamlit-based therapy booking application that digitised session scheduling, improved data accuracy by **~90%**, and freed up **50+ staff hours per week**.
- Built and integrated analytics dashboards to track therapy utilisation, patient engagement, and impact metrics, strengthening evidence-based reporting and fundraising efforts.
- Currently developing an automated financial aid triage and approval system to streamline support workflows for cancer patients and reduce turnaround time for assistance decisions.

<https://farajacancersupport.org/>

Education

Multimedia University

Bsc Computer Science
2013 - 2014

Studies Paused

Certifications

Google Project Management Specialization

Google
Dec 2024

[Certificate Link](#)

Data Engineering, Big Data, and Machine Learning on GCP Specialization

Google
January 2024

[Certificate Link](#)

Practical Decision-Making Using No-code ML on AWS

AWS
February 2023

[Certificate Link](#)

WhatsApp Business Platform for Developers

Meta
July, 2023

[Certificate Link](#)

Oracle Certified Associate

Institute of Advanced Technology
2017

Languages

Swahili Native	English Native
German Elementary (A2)	Spanish Beginner (A1)