

NICHOLAS BIIY BWALLEY

Data Architect | Enterprise Data Architecture | Data Governance | Analytics Platforms | Banking Systems

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[LinkedIn](#), [GitHub](#)

PROFESSIONAL SUMMARY

I am Nicholas Bwalley a Data Architect with six years of experience designing, implementing, and governing enterprise grade data architectures that support analytics, regulatory compliance, and business transformation. I specialize in aligning business processes, application systems, and data platforms through well-defined logical and physical data models. I have strong expertise in architecting data pipelines, data lakes, and analytical platforms that handle large scale, high velocity data while maintaining data quality, security, and privacy by design. I work closely with business stakeholders, data engineers, BI teams, and technology partners to translate enterprise information requirements into scalable, governed, and future ready data architectures within regulated financial services environments.

CORE TECHNICAL COMPETENCIES

Data Architecture and Modelling

Enterprise Data Architecture, Conceptual Logical and Physical Data Models, Dimensional Modelling, Normalization and Denormalization, UML, Metadata Architecture

Data Platforms and Storage

Data Lakes, Lakehouse Architectures, Analytical Data Stores, Historical Data Snapshots, Structured and Semi Structured Data Management

Data Integration and Pipelines

Enterprise Data Pipelines, ETL and ELT Design, Service Oriented Architecture Integration, API Based Data Exchange, Event Driven Data Flows

Databases and Query Languages

SQL, PL SQL fundamentals, Oracle, MySQL, MongoDB, Data Modelling and Optimization

Governance, Quality and Privacy

Data Governance Frameworks, Metadata Management, Data Dictionaries, Enterprise Taxonomies, Data Quality Standards, Privacy by Design, Regulatory Compliance Awareness

Analytics Enablement

Data Architecture for Business Intelligence, Advanced Analytics Support, Performance Optimization for Reporting and Dashboards

Technology and Development Foundations

Java, JavaScript, HTML, CSS, Node.js, Application Architecture Understanding, Enterprise Systems Integration

Methodologies and Leadership

Enterprise Architecture Practices, Agile Delivery, Stakeholder Engagement, Architecture Documentation, Cross Functional Collaboration

Others: Touch Typist with speeds averaging 120 Words Per Minute (WPM)

PROFESSIONAL EXPERIENCE

Data Architect and Analytics Platform Lead Remote March 2021 to Present

- Designed and maintained enterprise level data architectures supporting analytics, reporting, and machine learning use cases across fintech and financial services clients.
- Developed conceptual, logical, and physical data models aligned to business processes, regulatory requirements, and long-term analytics strategies.
- Architected data pipelines and storage frameworks to ingest, process, and manage large volumes of structured and unstructured data efficiently.
- Designed data lake and Lakehouse environments capturing historical snapshots and data transitions to support advanced analytics and high-performance reporting.
- Defined and governed metadata architecture including enterprise taxonomies, data dictionaries, and naming standards to improve data discoverability and consistency.
- Collaborated with data engineers and BI developers to review dataset implementations, enforce data standards, and ensure architectural compliance.
- Analysed enterprise information needs from operational, analytical, and compliance perspectives and translated them into scalable data solutions.
- Promoted data architecture best practices and continuously evolved designs based on emerging technologies, cloud capabilities, and vendor platforms.

- Ensured data privacy by design across the data lifecycle, supporting secure access controls and regulatory alignment.

Software Engineer and Data Analytics Specialist Remote March 2019 to February 2021

Supported the design and development of enterprise applications with strong emphasis on data modelling, integration, and analytics readiness.

Worked within service-oriented architectures to integrate multiple systems and data sources through well defined interfaces.

Collaborated with cross functional teams to gather requirements, document architectures, and support system enhancements.

Cybersecurity Analyst Intern | Senselearner Technologies Pvt., Remote | Sep 2023 – Dec 2023

- **Conducted end-to-end security assessments** including network scanning, vulnerability analysis, and penetration testing of web applications, leveraging tools such as OWASP, Metasploitable and Hacksplaining to identify and mitigate **95% of critical threats**, enhance system resilience by **40%**, and deliver comprehensive remediation reports with actionable insights.

EDUCATION

Sustainable Urban Planning and Development (Challenge Driven Education (CDE) project), Exchange Program

KTH Royal Institute of Technology, Stockholm, Sweden | Aug 2024 – Jan 2025

BSc Business Information Technology (First Class Honours, GPA 3.8/4.0)

Strathmore University, Nairobi, Kenya | Sep 2021 – Jun 2024

Diploma in Business Information Technology (Merit)

Strathmore University, Nairobi, Kenya | May 2019 – Sep 2021

PROJECT HIGHLIGHTS

- Led an AI-driven mobility optimization project in Viksjö, Sweden, using advanced machine learning algorithms to generate insights and inform municipal transport efficiency modeling.
- Built two profitable B2C SaaS products, [LinguaFlash](#) and [BlogFlow](#), both generated consistent Monthly Recurring Revenue (MRR) and sold them for a fortune.
- Published a research article called “AI-Powered Customer Churn Predictor” that uses Machine Learning in predicting the probability that a customer in the bank will default and leave the banking services or not based on his usage metrics. Check it out [here](#)

CERTIFICATIONS & ACHIEVEMENTS

- Published Research: AI-Powered Customer Churn Predictor, ReadyTensor (Mar 2025)
- Dean's List Award Academic Year (2021–2022 & 2022-2023), Strathmore University.
- Certified Transcriptionist (120WPM on average)
- Weightlifter 3rd Place Award, Strathmore Sports Day (Aug 2023)

LANGUAGES

- English (C2 – Native; Both Spoken & Written)
- Swahili (C2 – Native; Both Spoken & Written)
- French (C1 – Working Proficiency; Both Spoken & Written)

HOBBIES

- Fitness Coach
- Professional Swimmer
- Table Tennis
- Pool Games & Bowling
- Speed Cuber & Card Magician.