

Michael Ambrose Affare

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TECHNICAL SKILLS

- Python, Java, SQL (T-SQL, PL-SQL) • Microsoft SQL Server, Oracle 21g, MySQL, MongoDB, Redis, Cassandra, Neo4j
- Tableau, Restful API, Linux, Docker, AWS Athena, Spark, Hadoop, AI Prompt Engineering
- AWS (S3, EC2, RDS, DynamoDB, IAM, Route53, Glue), Google Cloud (Big Query, Cloud Run, SQL, Looker)

EDUCATION

Carnegie Mellon University • Pittsburgh, PA • Master of Information Systems Management May. 2023

- Dean's List Academic Achievement Award 2023 | Highest Distinction Honors | Vice President, Heinz Finance Club

Kwame Nkrumah University of Science and Technology • Kumasi, Ghana • BSc. Computer Engineering May. 2016

CERTIFICATIONS

- [AWS Certified Solutions Architect Associate \(SAA – C03\)](#) Oct. 2023 | [AWS Cloud Practitioner \(CLF\)](#) Sep. 2023
- [Neo4j Certified Professional](#) Apr. 2023 | [ITIL Foundation Certificate](#) Sep. 2019

WORK EXPERIENCE

Great Lakes Behavioral Research Institute • Pittsburgh, USA

Analytics Manager – Allegheny County Department of Human Services, AC DHS (Consultant) Jun. 2023 – present

- Led the Hello Baby program data analysis (using SQL, Tableau, and Python). This led to the optimization of the predictive risk model and enabled field teams to support priority-need families two months earlier than usual.
- Boosted process efficiency through a department-wide digital transformation initiative: implemented Git for code version control, Microsoft Planner for project management, and enhanced data documentation.
- Managed data integrations between service providers (NGOs, school districts, etc.) and AC DHS.

Carnegie Mellon University • Pittsburgh, USA

Cloud Engineer, Research Assistant (Part-time) Jan. 2023 – present

- Designed and deployed the Workforce Insight Tool to AWS using RDS, EC2, Route53, and S3.

Teaching Assistant (Part-time)

Aug. 2022 – Apr. 2023

- Head Teaching Assistant (TA) for Database Management 95-703 (Fall 2022), Head TA for Distributed Systems 95-702 (Spring 2023), and TA for Telling Stories with Data Visualization 94-870 (Spring 2023)
- Award: Information Systems Management (ISM) Most Outstanding Teaching Assistant Award (May. 2023).

FreshTrack Systems Limited • Queensland, Australia

Business Intelligence, Application Support Analyst (Part-time) Apr. 2022 – Aug. 2022

- Developed SSRS and Bold BI reports for fresh food supply chain stakeholders (e.g., distributors, retailers, farmers).
- Optimized T-SQL jobs and procedures to automate operations that maintained a 99.8% service availability KPI.

AirtelTigo (Airtel Ghana Limited) • Accra, Ghana

Senior Solutions Architect: Analyst, IT Operations (Full-time) May. 2017 – Aug. 2022

- **Ericsson:** Led the migration of 8 core IT systems to integrate with the Ericsson Dynamic Activation (EDA) platform.
- **Meta:** Led the integration of Simbrella Loan Service 3rd party REST APIs with Meta-Facebook as a VAS service for AirtelTigo Customers, resulting in a 400% increase in VAS revenue and customer acquisition growth in 2020.
- **Huawei:** Managed the migration of 55 third-party companies from Ericsson IN to the Huawei Convergent Billing System as part of Airtel and Tigo merger activities.
- **NCA.gov.gh:** Integrated national identity verification API with SIM registration to reduce mobile fraud by 60%.
- Implemented telecommunications consumer products by coordinating cross-functional technical teams that increased revenues by (average) 5% from airtime and data products month-on-month in 2020.
- Led the development of a distribution management system (for sales/supply chain reporting and inventory management) using Node.js, Java (Android), and T-SQL, which yielded a \$50,000 procurement saving.
- Analyzed business requirements by designing technical solutions and implementation strategies for the Airtel and Tigo merger integrations to achieve technical cost savings and system optimization.
- Award: Star Performer (Dec. 2021, Feb. 2020, Dec. 2019), Simplicity, Transparency, Relevance Award (Dec. 2018)

PROJECTS

Estée Lauder • Web3 Analytics Project • Data Engineer, Student Consultant (CMU) Jan. 2023 – Apr. 2023

- Implemented a low-cost, scalable, and reusable [data engineering pipeline](#) to visualize [Web3 personas, wallets, and NFTs for Estée Lauder](#) using APIs, Python, SQL, Neo4j graph database, and MongoDB.

Yum Brands • ESG Social Media Analytics Project • Data Analyst, Student Consultant (CMU) Aug. 2022 – Jan. 2023

- Developed and researched three data-driven recommendations by assessing the effectiveness of Yum Brands' ESG initiatives using social media sentiment analysis, market research, and data analysis.