

## Michael Ambrose Affare

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### TECHNICAL SKILLS

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**Object-Oriented Programming:** Python, Java

**Databases:** SQL (T-SQL, PL-SQL), Microsoft SQL Server, Oracle 11g / 21g, MySQL, MongoDB, Redis, Cassandra, Neo4j

**Data Engineering/visualization:** Tableau, Restful API, Linux, Docker, AI Prompt Engineering

**Cloud computing:** AWS (S3, EC2, RDS, DynamoDB, IAM), Google Cloud (Big Query, Cloud Run, SQL, Looker)

### WORK EXPERIENCE

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#### Great Lakes Behavioral Research Institute – Pittsburgh, USA

June 2023 – present

*Analytics Manager (Consultant)*

- Enhanced program assessments by leading four analysts utilizing SQL, Tableau, Python, and R to generate insights through dashboards, reports, and tools. This increased data-driven program decisions by the Office of Community Services at Allegheny County's Department of Human Services (AC DHS) to support early learning resource centers, family centers, and school districts.
- Achieved process efficiency within the Analytics Technology and Planning (ATP) unit by spearheading a department-wide digital transformation. Implemented code version control using Git, project management using Microsoft Planner, and data documentation.
- Managed data integrations between service providers (NGOs, school districts, etc.) and AC DHS.

#### Carnegie Mellon University – Pittsburgh, USA

August 2022 – May 2023

*Cloud Engineer - Research Assistant (Part-time)*

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

*Teaching Assistant (Part-time)*

- Head Teaching Assistant (TA) for [Database Management](#) (Fall 2022), Head TA for [Distributed Systems](#) (Spring 2023), and TA for [Telling Stories with Data Visualization](#) (Spring 2023)
- Award: Information Systems Management (ISM) Most Outstanding Teaching Assistant Award 2023.

#### FreshTrack Systems Limited – Queensland, Australia

April 2022 – August 2022

*Business Intelligence/Application Support Analyst (Part-time)*

- Developed insightful BI reports and financial analyses for fresh food supply chain stakeholders (farmers, distributors, retailers) using T-SQL, SSRS, and Bold BI, applying statistical analysis and forecasting after gathering stakeholder requirements.

#### AirtelTigo (Airtel Ghana Limited) – Accra, Ghana

May 2017 – August 2022

*Senior Solutions Architect: Analyst, IT Operations (Full-time)*

- 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.
- Presented technical solutions to executives/stakeholders to drive business innovation & decision-making.
- Star Performer (12/2021, 02/2020, 12/2019); Simplicity, Transparency, Relevance Excellence Award (12/2018)

*Senior Applications & Data Support Analyst, OSTEC Limited (Contract)*

- Maintained the business systems and databases of Tigo Ghana Limited by automating support tasks with Python and T-SQL jobs, which ensured an availability KPI of over 99.8%.

## EDUCATION

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### Carnegie Mellon University

*Master of Information Systems Management*

May 2023

GPA 3.88

- Dean's List Academic Achievement Award (Fall 2023).
- Graduated with the Highest Distinction Honors.
- Vice President, Heinz College Finance Club, 2022-2023
- Student Consultant: Social Media Analyst for Yum Brands (KFC, Taco Bell, etc.); ESG impact and efforts.
- Capstone Project: [Web3 Analytics for Estée Lauder](#); Visualization web3 offerings using graph databases.

### Kwame Nkrumah University of Science and Technology

*Bachelor of Science in Computer Engineering*

May 2016

GPA 3.45

- Class Representative

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## CERTIFICATIONS

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| • ITIL Foundation Certificate   | September 2019 |
| • <a href="#">Neo4j Certified Professional</a>                          | April 2023     |
| • <a href="#">AWS Cloud Practitioner (CLF)</a>                          | September 2023 |
| • AWS Certified Solutions Architect – Associate (SAA – C03) – Scheduled | November 2023  |

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## PROJECTS

### CMU MISM Degree and US Job Market Analytics - Data Visualization Project, CMU, USA

November 2022

- Visualized the Master of Information Systems Management program's historical student employment records from 30+ PDF documents to generate insights for career services (<https://bit.ly/mismjobs>)

### Automated Data Collection for client leads' contact information, Hubble.sh, Australia

July 2022

- Developed an automated Python data pipeline that scraped data from over 500+ company websites (and verified company registration against Australian Business Registry API) that created a contact information report of potential clients in Adelaide. This improved B2B engagement and increased conversion by 15%.

### National Telecommunications SIM Re-Registration Database Project, AirtelTigo, Ghana

August 2022

- Led AirtelTigo's team on the [National Communication Authority's Committee to verify SIM cards](#).
- Developed and optimized the customer registration database (CRM) to meet regulatory requirements.