

Michael Ambrose Affare

Phone: 412-983-3254 | Email: aaffare@gmail.com

LinkedIn: [linkedin.com/in/michaelaffare](https://www.linkedin.com/in/michaelaffare) | Portfolio: michaelaffare.com

PROFESSIONAL SUMMARY

Innovative and results-driven Solutions Architect with expertise in Business Intelligence Engineering and over 6 of experience in data analytics, data engineering, and cloud solutions. Proficient in SQL, AWS services, and data visualization tools like Tableau. Proven ability to translate complex data into actionable insights, lead technical teams, and drive strategic decision-making. Seeking to leverage my skills to solve complex problems and enhance customer experiences.

EDUCATION

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

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

BSc. Computer Engineering, Kwame Nkrumah University of Science & Technology, Kumasi, Ghana — May 2016

CERTIFICATIONS

- [AWS Certified Solutions Architect Associate \(SAA – C03\)](#) — Oct 2023
- [AWS Cloud Practitioner \(CLF\)](#) — Sep 2023
- [Neo4j Certified Professional](#) — Apr 2023
- [CompTIA Security+](#) — May 2024 | [Certified in Cybersecurity CC \(ISC2\)](#) — Jun 2024
- [ITIL Foundation Certificate](#) — Sep 2019

TECHNICAL SKILLS

- **Programming Languages:** SQL (T-SQL, PL-SQL), Python, Java
- **Databases:** Oracle 21g, Microsoft SQL Server, MySQL, MongoDB, Neo4j, Redis, Cassandra
- **Cloud Services:** AWS (S3, EC2, RDS, DynamoDB, IAM, Route53, Glue, Athena, Redshift), GCP (BigQuery, Cloud Run, Cloud SQL)
- **Data Visualization:** Tableau, QuickSight, Bold BI, Looker
- **Tools & Technologies:** RESTful APIs, Excel, Linux, Docker, Git, AI Engineering

WORK EXPERIENCE

Analytics Manager (Consultant)

Allegheny County Department of Human Services (AC DHS), Great Lakes Behavioral Research Institute, Pittsburgh, PA

Jun 2023 – Present

- **Data Analysis & Reporting:** Led the KPI and metrics definition for 9 program areas and 42+ providers, overseeing analytics for \$175 million in expenditures for the Office of Community Services (OCS).
- **Team Leadership:** Managed analysts to develop reports and dashboards using SQL, Tableau, and Python, enhancing decision-making for the OCS.
- **Strategic Insights:** Conducted deep-dive analyses on the Hello Baby network of services, leading to predictive model recalibration and reducing identification time of high-risk families by 2 months.
- **Process Improvement:** Implemented Git for version control, project management with Asana and improved data documentation, streamlining workflows across all teams in the Analytics Department.
- **Data Integration:** Designed workflows for integrating data from 70+ service providers, enhancing cross-program analytics.

Technical Project Lead - Cloud Engineer (Part-time)

Carnegie Mellon University, Pittsburgh, PA

Jan 2023 – May 2023

- **AWS Deployment:** Designed and deployed a Workforce Insight Analytics Tool utilizing AWS services like RDS, EC2, Route53, and S3 and ensured cost efficiency using tools like AWS Budgets and Cost Explorer.

Teaching Assistant (Part-time)

Carnegie Mellon University, Pittsburgh, PA

Aug 2022 – Apr 2023

- **Course Proficiency & Leadership:** [Head TA Database Management 95-703 \(Fall 2022\)](#), [Distributed Systems 95-702 \(Spring 2023\)](#), and [TA for Telling Stories with Data Visualization 94-870 \(Spring 2023\)](#)
- **Recognition:** Received the ISM Most Outstanding Teaching Assistant Award (May 2023).

Business Intelligence & Application Support Analyst (Part-time)

FreshTrack Systems Limited, Queensland, Australia

Apr 2022 – Aug 2022

- **BI Reporting:** Developed SSRS and Bold BI reports for supply chain stakeholders, improving data visibility.
- **Automation:** Optimized T-SQL jobs to automate operations, achieving 99.8% service availability.

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

AirtelTigo (Airtel Ghana Limited), Accra, Ghana

May 2017 – Aug 2022

- **System Development:** Led the in-house development of a distribution management system, saving \$50,000 in procurement costs.
- **Technical Solutions:** Designed solutions for the Airtel and Tigo merger, optimizing systems and reducing costs.
- **System Migration:** Managed migration of core IT systems to Ericsson Dynamic Activation platform.
- **API Integration:** Integrated third-party REST APIs, boosting VAS revenue and customer acquisition by 400% in 1 month for the Simbrella Loan Service after Meta APIs integration.
- **Fraud Reduction:** Reduced mobile fraud by 60% by integrating SIM registration process with the national identity verification API.
- **Revenue Growth:** Increased revenues by 5% month-over-month through new product implementations.
- **Awards:** Star Performer (Dec 2021, Feb 2020, Dec 2019), Simplicity, Transparency, Relevance Award (Dec 2018)

PROJECTS

Data Engineer, Estée Lauder Web3 Analytics Project, Carnegie Mellon University — Jan 2023 – Apr 2023

- Implemented a scalable data pipeline to visualize Web3 personas, wallets, and NFTs using APIs, Python, SQL, Neo4j, and MongoDB.

Data Analyst, Yum Brands Social Media Analytics Project, Carnegie Mellon University — Aug 2022 – Jan 2023

- Conducted sentiment analysis and research to provide recommendations for Yum Brands' ESG initiatives.

Data Engineer Intern, Hubble.sh, Adelaide, Australia — May 2022 – July 2022

- Developed an ETL pipeline to generate contact lists compatible with Apple, Google, and Salesforce by aggregating company data from Google Maps, scraping website contact pages, and integrating API responses from the Australia Business Register. This led to a 15% increase in conversion rates for Hubble.sh by discovering new clients and facilitating easy access to their contacts.