

# Michael Ambrose Affare

+14129833254 ◇ aaffare@gmail.com ◇ <https://michaelfaffare.com/> ◇ <https://www.linkedin.com/in/michaelfaffare/>

## SUMMARY

An innovative, results-driven Data Professional (and Cloud Solutions Architect) enabling digital transformation through secure data engineering and analytics. Currently, leading an analytics team that guides data-driven decision making for Allegheny County DHS's Offices of Community Services and Children Youth & Family (\$470M+/yr) by delivering detail-oriented analytical thinking, data pipelines, dashboard insights, reporting solutions and process improvements.

## SKILLS

**Programming** Python, SQL, Oracle 21g, Java, Microsoft SQL Servers, MongoDB, Neo4j, API Development  
**Cloud Computing** AWS, Glue, S3, EC2, Athena, Redshift, Databricks, Google Cloud Platform, Azure  
**Visualisation** Tableau, Power BI, ArcGIS  
**Data Processing** ETL, AI Prompt Engineering, Generative AI, IT Automation, Report Development, Data Modeling  
**Leadership** Mentorship, Team Leadership, Strategy Implementation, Global Teams, Cross-functional Initiatives  
**Communication** C-Level Presentations, Technical Consultation, Training, Problem Solving  
**Project Management** Agile Methodologies, Project Management, Portfolio Management, ITIL Certified

## CERTIFICATIONS

<b>Business Intelligence Professional</b> , Google	Jul '25
<b>Data Analytics Professional</b> , Google	Jun '25
<b>Security Analytics Professional (CySA+)</b> , CompTIA	Apr '25
<b>Security+</b> , CompTIA	May '24
<b>Certified Solutions Architect - Associate</b> , AWS	Oct '23
<b>Certified Cloud Practitioner</b> , AWS	Sep '23

## PROFESSIONAL EXPERIENCE

**Data Analytics Manager** Jun '23 — Present  
Allegheny County Department of Human Service  
Analytics, Technology and Planning consultant via Great Lakes Behavioral Research Institute

- Led an 8-member analytics team to inform \$470M+/year data-driven decisions by developing insights, reports, and dashboards.
- Achieved a 40% improvement in dashboard utility by redefining KPIs and creating an operations tech catalog for 12+ program.
- Enhanced partner data integration operations by standardizing ETL pipelines and automating data validation across 50+ providers.
- Boosted analyst efficiency by implementing GitHub, Asana, and LLM tools; built onboarding courses and data documentation.
- Utilized statistical analysis, mathematical modeling, and data manipulation techniques to structure raw data sets for analytical use.

**Business Intelligence and Application Support Analyst, Part-time** Apr '22 — Aug '22  
FreshTrack Systems Limited  
Boonah, Australia

Providing supply chain management and traceability software solutions for the fresh produce and aquaculture industries.

- Built BI dashboards (SSRS, SSIS, Bold BI) improving visibility across supply chain.
- Maintained 99.8% uptime by optimizing T-SQL and automating backend ops.

**Senior Consumer Solutions Architect, IT Operations** Jan '18 — Jan '22  
Airtel Ghana Limited  
Accra, Ghana

Bharti Airtel is a leading global telecommunications company with operations in 18 countries across Asia and Africa.

- Saved \$150K by leading in-house development of a web/mobile Distribution Management System, replacing a vendor system.
- Drove 5% MoM revenue growth by launching targeted digital telecommunication services products and bundles.
- Cut errors and inefficiencies in the sim card provisioning technical process by 80%, saving over \$100k by process automation.

**Business Solutions Architect, IT Operations** Oct '18 — Dec '21  
Airtel Ghana Limited  
Accra, Ghana

- Reduced post-merger operation costs by designing and implementing unified IT platforms and migrating subscribers.
- Reduced mobile fraud by 60% and improved customer PII data quality by 98% by integrating a National Identification Authority API.
- Boosted Simbrella mobile loan usage by 400% via Facebook-integrated VAS API integration.

**Application Support Engineer - Level 2** May '17 — Sep '18  
Millicom Ghana Limited  
Accra, Ghana

Millicom International Cellular SA is an international telecommunications and media company across Asia and Africa.

- Improved uptime, KPI adherence and productivity by maintaining Linux/SQL systems through standardizing workflows.

## EDUCATION

**Master in Information Systems Management**, Carnegie Mellon University (GPA: 3.88) Aug '21 — May '23  
Pittsburgh, United States

- Heinz College of Information Systems and Public Policy
- **Highest Distinction Honors**
- **Research Assistant**, Block Center for Technology and Society
  - Enabled cost-effective analytics via AWS-deployed (RDS, Route53, EC2, S3) Workforce Insight Tool for collaborative research.
- **Teaching Assistant**, Database Management 95-703, Distributed Systems 95-702, and Telling Stories with Data Visualization 94-870
  - . Awarded "2023 ISM Most Outstanding TA" for excellence.
- **Student Consultant**, Student Projects and Internships
  - **Estée Lauder**: Built Web3 data pipeline (Python, Neo4j, MongoDB) to analyze their customer's Web3 (NFT wallets) behavior.
  - **Yum Brands**: Delivered ESG insights for Yum Brands via social media sentiment analysis.
  - **Hubble.sh**: Boosted conversions by 15% through a Google Maps, web scraping, and APIs CRM-integrated ETL pipeline.

**Bachelor's degree in Computer Engineering**, Kwame Nkrumah University of Science and Technology Sep '12 — May '16  
Kumasi, Ghana