

Michael Ambrose Affare

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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, project planning, data pipelines, dashboard insights, reporting solutions, and process improvements. Skilled in managing multiple projects concurrently, demonstrating strong project leadership and coordination of projects, and excelling in research and development initiatives.

SKILLS

Programming Python, SQL, Oracle 21g, Java, Microsoft SQL Servers, MongoDB, Neo4j, API Development, Tableau, Power BI, ArcGIS
Cloud Computing AWS, Glue, S3, EC2, Athena, Redshift, Databricks, Google Cloud Platform, Azure
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, Project leadership
Communication C-Level Presentations, Technical Consultation, Training, Problem Solving, Presentation Skills, Stakeholder Engagement
Project Management Agile Methodologies, Project Management, Portfolio Management, ITIL Certified, Research and Development, R&D, Project Server, Technology Projects, Aspiring PMP, Innovation, Budget Management, Scheduling, Stakeholder Management

CERTIFICATIONS

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

PROFESSIONAL EXPERIENCE

Data Analytics Manager Allegheny County Department of Human Service Analytics, Technology and Planning consultant via Great Lakes Behavioral Research Institute	Jun '23 — Present Pittsburgh, United States
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- 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 FreshTrack Systems Limited Providing supply chain management and traceability software solutions for the fresh produce and aquaculture industries.	Apr '22 — Aug '22 Boonah, Australia
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- 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 Airtel Ghana Limited Bharti Airtel is a leading global telecommunications company with operations in 18 countries across Asia and Africa.	Jan '21 — Jan '22 Accra, Ghana
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- 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 and commercializing 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 Airtel Ghana Limited	Oct '18 — Dec '20 Accra, Ghana
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- 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 Millicom Ghana Limited Millicom International Cellular SA is an international telecommunications and media company across Asia and Africa.	May '17 — Sep '18 Accra, Ghana
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- 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
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- 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
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