

# Michael Ambrose Affare

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## EDUCATION

<b>Carnegie Mellon University</b> <i>Master of Information Systems Management</i>	May 2023
<b>Kwame Nkrumah University of Science and Technology</b> <i>Bachelor of Science in Computer Engineering</i>	May 2016

## SKILLS

**Programming Languages:** SQL (T-SQL, PL/SQL), Python (Pandas, NumPy, MapReduce, Scrapy, Selenium), Java  
**Databases:** Microsoft SQL Server, Oracle 11g / 21g, MySQL, MongoDB, Redis, Cassandra, Neo4j, Spark, Teradata, Redshift, DynamoDB  
**Skills:** Tableau, Power BI, SSRS, Postman/SoapUI, Object-Oriented Programming, Git, Linux OS, Azure, JIRA, Docker, AWS (S3, EC2, RDS), Google Cloud, Project Management, Restful API integration & development, Processing Structured & Unstructured Data  
**Certifications:** ITIL® Foundation Certificate, Neo4j Certified Professional, Google IT Automation with Python Professional Certificate by Google, Databases, and SQL for Data Science by IBM, Python 3 Programming Specialization by University of Michigan

## WORK EXPERIENCE

<b>Carnegie Mellon University, Heinz College of Information Systems and Public Policy – Pittsburgh, USA</b> <i>Graduate Teaching Assistant &amp; Research Assistant (Part-time)</i>	August 2022 – present
<ul style="list-style-type: none"><li>Facilitated lab sessions, graded assignments/quizzes, and held office hours to explain concepts to graduate students.</li><li>Led teams as Head TA for <a href="#">Database Management</a> (Fall 2022), Head TA for <a href="#">Distributed Systems</a> (Spring 2023), and TA for <a href="#">Telling Stories with Data Visualization</a> (Spring 2023): Received the “ISM Outstanding Teaching Assistant Award” (2023)</li><li>Created a visualization tool that analyzed job mobility in Allegheny County to address job displacement and skills-to-job mapping questions for recruiters and policymakers; Research Assistant, Block Center for Technology and Society (2023)</li></ul>	
<b>FreshTrack Systems Limited – Queensland, Australia</b> <i>Business Intelligence/Application Support Analyst (Part-time)</i>	April 2022 – August 2022
<ul style="list-style-type: none"><li>Developed insightful BI reports and financial analyses for fresh food supply chain stakeholders (farmers, distributors, retailers) using Power BI, T-SQL, SSRS, and Bold BI, applying statistical analysis and forecasting after gathering requirements from internal and external stakeholders. This provided insights to stakeholders and improved business processes.</li><li>Analyzed and integrated large datasets from multiple systems and generated insights to guide customer decision-making.</li><li>Ensured report stability and continuous improvement of processes and services using agile methodology with stakeholders.</li></ul>	
<b>AirtelTigo (Airtel Ghana Limited) – Accra, Ghana</b> <i>Senior Business Solutions Architect: Analyst (Full-time)</i>	October 2018 – August 2022
<ul style="list-style-type: none"><li>Led cross-functional technical teams and analyzed business requirements to design appropriate strategies and prioritize solutions. Presented and explained analysis and technical solutions to executives and internal stakeholders in a simple and easy-to-understand manner to drive business innovation and produce competitive airtime/data products for customers.</li><li>Implemented end-to-end telecommunications products based on identified trends and fast-changing market movements.</li><li>Developed a custom Sales-Distribution Management/Inventory System and associated reports for sales and supply chain using T-SQL, and SSRS, exhibiting experience in data manipulation languages and creating queries for data warehousing.</li><li>Maintained knowledge management of reporting systems and technical documentation, including version control using Git. Developed the technical process documentation with the compliance team, indicating analytical project management.</li><li>Recognition: Star Performer (12/2021, 02/2020, 12/2019); Simplicity, Transparency, Relevance Excellence Award (12/2018)</li></ul>	
<b>OSTEC Limited – Accra, Ghana</b> <i>Senior Applications &amp; Data Support Analyst (Contract)</i>	May 2017 – October 2018
<ul style="list-style-type: none"><li>Maintained and monitored the business system and database of Millicom Ghana Limited ensuring an availability KPI of over 99.8%, indicating proficiency in interacting with various database and file storage systems. Created new KPI metrics.</li></ul>	

## PROJECTS

<b>CMU MISM Degree and US Job Market Analytics - Data Visualization Project, CMU, USA</b>	October 2022 – November 2022
<ul style="list-style-type: none"><li>Visualized the Master of Information Systems Management program’s historical student employment records to share insights for career services. Extracted data from over 30 PDFs and transformed and loaded the data for visualization. (<a href="https://bit.ly/mismjobs">https://bit.ly/mismjobs</a>)</li></ul>	
<b>Automation of Data Collection for leads' contact information, Hubble.sh, Australia</b>	June 2022 – July 2022
<ul style="list-style-type: none"><li>Developed an automated Python script (data pipeline) that scraped data from over 500+ company websites (and verified company registration against Australian Business Registry API) to create a contact information report of potential clients in Adelaide. This improved B2B engagement resulting in a 20% increase in conversion.</li></ul>	
<b>Telecommunications Companies Customer Registration Database Project, AirtelTigo, Ghana</b>	November 2021 – August 2022
<ul style="list-style-type: none"><li>Developed and optimized the customer registration database to meet regulatory requirements by normalizing, indexing, and creating T-SQL procedures, triggers, and jobs. Demonstrating experience designing, analyzing, and optimizing databases.</li></ul>	

## LEADERSHIP

<b>Vice President, Heinz College Finance Club, CMU, Pittsburgh</b>	August 2022 – May 2023
<b>Admissions Ambassador, Heinz College Finance Club, CMU, Pittsburgh</b>	August 2022 – May 2023
<b>Secretary, Students' Representative Council, CMU, Australia</b>	January 2022 – August 2022