## **Michael Ambrose Affare**

+1 (412) 983 3254 | maffare@andrew.cmu.edu | www.linkedin.com/in/michaelaffare

#### **EDUCATION**

#### **Carnegie Mellon University**

Master of Information Systems Management

Kwame Nkrumah University of Science and Technology

Bachelor of Science in Computer Engineering

May 2023

May 2016

#### **SKILLS**

Programming Languages: SQL, Python (Pandas, NumPy, MapReduce, Scrapy, Selenium), Java

Databases: Microsoft SQL Server, Oracle (PL/SQL), 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

Certifications: ITIL® Foundation Certificate, 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**

# Carnegie Mellon University, Heinz College of Information Systems and Public Policy – Pittsburgh, USA

August 2022 - present

Graduate Teaching Assistant & Research Assistant (Part-time)

- Facilitated lab sessions, graded assignments/quizzes, and held office hours to explain concepts to graduate students.
- Worked as Head TA for Database Management (Fall 2022), Head TA for Distributed Systems (Spring 2023), TA for Telling Stories with Data/Data Visualization (Spring 2023): Received the "ISM Outstanding Teaching Assistant Award" (2023)
- 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)

#### 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 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.
- Analyzed and integrated large datasets from multiple systems and generated insights to guide customer decision-making.
- Ensured report stability and continuous improvement of processes and services using agile methodology with stakeholders.

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

October 2018 – August 2022

Senior Business Solutions Architect: Analyst (Full-time)

- 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.
- Implemented end-to-end telecommunications products based on identified trends and fast-changing market movements.
- 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.
- 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.
- Recognition: Star Performer (12/2021, 02/2020, 12/2019); Simplicity, Transparency, Relevance Excellence Award (12/2018)

#### OSTEC Limited - Accra, Ghana

May 2017 - October 2018

Senior Applications & Data Support Analyst (Contract)

 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.

## **PROJECTS**

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

October 2022 - November 2022

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.
(https://bit.ly/mismjobs)

## Automation of Data Collection for leads' contact information, Hubble.sh, Australia

June 2022 – July 2022

• 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.

## Telecommunications Companies Customer Registration Database Project, AirtelTigo, Ghana

November 2021 – August 2022

 Developed and optimized the customer registration database to meet regulatory requirements by normalizing, indexing, anddeveloping T-SQL procedures, triggers, and jobs. demonstrating experience designing, analyzing, and optimizing databases.

#### **LEADERSHIP**