WD

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Objective

Results-driven Research Officer, Data Manager and Analyst with 4.2 years of experience in data management, analysis, and visualisation. Proficient in Power BI, Tableau, VBA, SQL, R and Python, I specialise in delivering actionable insights to optimise business processes. I am passionate about using data to drive impactful decision-making in dynamic environments.

Summary of Expertise

- Extensive experience in data analysis and visualisation using Power BI, Tableau, STATA and R.
- Proficient in developing and maintaining relational databases with SQL, enabling advanced analytics using Python.
- Skilled in presenting complex data insights in transparent, actionable formats to diverse stakeholders.
- Passionate about using large datasets to identify trends, inform strategic decisions, and deliver measurable impact.

Key Skills

- **Data Analytics and Reporting**: Experienced with Power BI, Tableau, STATA, SPSS, R, Python and Microsoft Access for data analysis and generating actionable insights.
- Database Design and Modelling: Proficient in creating ERDs and relational schemas using ERDPlus, SQL and Microsoft Access.
- **Database Management Systems (DBMS)**: Skilled in managing databases with MySQL, Oracle SQL, Microsoft SQL Server, and PostgreSQL.
- **Specialised Data Management Systems**: Competent in using REDCap for data collection and management in research settings.
- **Data Visualisation**: Expertise in creating interactive and impactful visualisations with Power BI, Tableau, and Microsoft Excel.
- **Spatial Analysis and GIS Tools**: Proficient in spatial analysis and mapping using ArcGIS and QGIS to generate geographic insights and support data-driven decision-making
- Statistical Analysis: Advanced skills in STATA, R, SPSS, and Python for statistical modelling and analysis.
- **Programming Skills**: Proficient in SQL, Python (intermediate), R (advanced), HTML, and CSS.

Professional Experience

McDonald's Bennett Restaurant, Bournemouth - United Kingdom

Customer Care Representative (Part-Time)

November 2023 – Present.

- Demonstrated efficiency in assisting customers with self-service kiosks and mobile apps, swiftly resolving technical issues related to orders and payments to ensure a smooth experience.
- Proactively addressed customer complaints, such as order errors or delays, while maintaining
 professionalism and providing practical solutions by reassuring customers of our commitment to
 service excellence.
- Showcased strong teamwork by collaborating with team members during peak hours, prioritising tasks like order preparation and supply restocking to meet customer demands efficiently.
- Educated customers about the benefits of digital tools, including loyalty programs and online ordering, to enhance convenience.
- Gathered customer feedback on their experiences and reported recurring issues, such as kiosk malfunctions, to management for improvements.

Data Manager and Analyst

Navrongo Health Research Centre, Ghana August 2019 – February 2023

- Utilised SQL to manage and extract large health datasets, preparing data for comprehensive analysis using R, STATA, and Python tools.
- Developed and maintained a longitudinal relational database for a health and demographic surveillance system (HDSS), ensuring data integrity through robust SQL extraction, cleaning, and preprocessing techniques.
- Conducted in-depth data management and analyses of pneumococcal disease and meningitis datasets using SQL, STATA, and R to identify trends and correlations supporting targeted interventions.
- Designed SQL workflows to automate routine reporting processes, preparing clean datasets for further statistical analysis in Python and STATA, resulting in reduced manual errors and enhanced efficiency.
- Created real-time monitoring tools and dashboards for studies related to meningitis, pneumonia, and sickle cell disease using SQL and Power BI, enabling timely decision-making by the study team.
- Applied advanced statistical techniques in STATA and R, including regression analysis and
 predictive modelling, to identify patterns and optimise workflows while employing Python to
 automate complex analytical processes.
- Produced dashboards, reports, and presentations by integrating SQL outputs with advanced analytics from R and STATA to communicate critical insights effectively to project teams and stakeholders.
- Led health and demographic surveillance projects, integrating SQL for data management with REDCap and Power BI to enhance data quality and operational efficiency.
- Combined SQL and STATA to perform advanced data quality checks and validation workflows, ensuring accuracy and consistency across all datasets prepared for analysis.
- Used ArcGIS and QGIS for spatial data analysis and visualisation to identify malaria and rabies hotspots and map under-five and maternal mortality trends to inform geographically targeted interventions.

Education

Master of Science in Information Technology

Bournemouth University, United Kingdom Completed: September 2024

Achieved Distinction (75.67%)

Bachelor of Science in Public Health

University for Health and Allied Sciences, Ghana

Completed: July 2019

Achieved 3.12 of 4.0

Certifications

- IBM Machine Learning with Python (2024) Coursera
- Cybersecurity Training (2024) Bournemouth University
- Good Clinical Practice (2019, 2022, 2024) NDAT CTN, Ghana FDA
- Microsoft Power BI Professional Developer (2023) Coursera
- Oracle SQL Developer (2023) Coursera
- Data + Design Developer (2023) Leaders of Africa Institute
- Data analysis with Microsoft Excel (2023) Coursera
- Geographic Information Systems (2018) UHAS

Professional Body

• Member of BCS, The Chartered Institute for IT (2024–Present)

List of Scientific Publications

- Dormechele William, Emmanuel Osei Bonsu, Caleb Boadi, Mercy Oseiwah Adams, Benedictus Atsu Hlormenu, Stephen Kwakye Addo, Bright Boatey Bossman, and Isaac Yeboah Addo Bonsu. "Determinants of intention to conceal tuberculosis status among family members: an analysis of seven Sub-Saharan African countries." BMC Infectious Disease 24, 175 (2024). https://doi.org/10.1186/s12879-024-09064-y
- Hlormenu, Benedictus Atsu, Emmanuel Osei Bonsu, Caleb Boadi, William Dormechele, Mercy Oseiwah Adams, Bright Boatey Bossman, Stephen Kwakye Addo, and Isaac Yeboah Addo. "Enablers and barriers to the implementation of breast self-examination (BSE) education programmes among adolescent girls in Sub-Saharan Africa (SSA): an integrative systematic review protocol." BMJ open 14, no. 11 (2024): e078339.
- Kassim, Alex Bapula, Sam Kofi Newton, **Dormechele William**, Beatrice Baah Rahinatu, Clement Tiimim Yanbom, Isaac Kofi Yankson, and Easmon Otupiri. "Effects of a community-level intervention on maternal health care utilisation in a resource-poor setting of Northern Ghana."
 BMC Public Health 23, no. 1 (2023): 1491. https://doi.org/10.1186/s12889-023-16376-2
- Amponsah, S. K., Apenkwa, J., Yeboah, E., Ayaaba, E., Dormechele, W., & Okrah, A. (2023).
 "Spatial Dynamics of Malaria Transmission in the Tano North Municipality of Ghana: A Geospatial Analysis Approach." *Translational Medicine*, 13, 308. https://doi.org/10.35248/2161-1025.23.13.308

- Asiedu, Emmanuel, Abraham Assan, and Dormechele William. "Food safety knowledge and practice among pregnant women: A cross-sectional study in Ghana." *Journal of Public Health Research* 10, no. 3 (2021): jphr-2021. https://doi.org/10.4081/jphr.2021.2009.
- Bapula, Alex, Sam Kofi Newton, Dormechele William, Beatrice Baah Rahinatu, and Easmon Otupiri. "Birth preparedness and complication readiness among pregnant women in a resource-limited setting in rural Northern Ghana." PAMJ-One Health 6, no. 9 (2021). https://doi.org/10.11604/pamj-oh.2021.6.9.26900
- Dormechele William, George Pokoanti Wak, and Francis Bruno Zotor. "Prevalence and trend of malaria with anaemia among under-five children in Jasikan District, Ghana." The North African Journal of Food and Nutrition Research 4, no. 8 (2020): 285-291. https://doi.org/10.51745/najfnr.4.8.285-291