

RESEARCH INTERESTS

Multivariate Analysis, high-dimensional statistical inference within multiple hypothesis testing frameworks and mixed effects modeling

EXPERIENCE

Research Statistician Intern |

May -August 2024

Institute for Mathematical and Statistical Innovation

- Collaborated with neuroscience experts to integrate functional and structural brain data, generating comprehensive task-based brain networks
- Conducted advanced multivariate distance matrix regression (MDMR) analysis on fMRI data, successfully identifying key brain connections associated with cognitive flexibility and general intelligence.
- Developed and implemented a robust cross-validation procedure across 1,000 data subsets, ensuring the stability and reproducibility of significant neural connections in a large-scale dataset.

GRADUATE RESEARCH ASSISTANT |

August 2023 - Present

Montana State University Bozeman – Statistical Consulting and Research Services (SCRS)

- Cultivates strong client relationships through effective communication, problem-solving, responsiveness, and tailored statistical solutions.
- Spearheads the application of advanced statistical methodologies, resulting in innovative solutions for clients' complex research inquiries from diverse disciplines.

GRADUATE TEACHING ASSISTANT |

August 2021 - July 2023

Montana State University Bozeman - Bozeman, MT

- Cultivated an inclusive and participatory classroom atmosphere, resulting in consistently high levels of student engagement in introductory probability and statistics course of 80-100 class size.
- Revolutionized teaching with innovative methods, leading to sustained high student engagement and improved average grades.

DATA ANALYST |

January 2021 - August 2021

Ghana Statistical Service, 2021 Population and Housing Census

- Streamlined analytics processes for key metrics by training and supervising a proficient team of 30 data monitors, enabling efficient report generation and census data acquisition.
- Led cross-functional team in utilizing data analysis to enhance census data processing for Ashanti region, resulting in 5% improved data integrity and substantial reduction in processing time.
- Played an integral role in the development and generation of the 2021 Population and Housing Census Preliminary Report for Ghana.

TEACHING AND RESEARCH ASSISTANT |

September 2019 - August 2020

Kwame Nkrumah University of Science and Technology (KNUST)

- Collaborated with other research personnels in quantitative research projects.
- Trained and supervised students in technical statistical analysis using R programming software.
- Graded papers, exams, laboratory reports, assignments and project assessment.

EDUCATION

1. Doctor of Philosophy, PhD in Statistics | Montana State University - Bozeman

August 2023 - December 2026

- 3.94 GPA

2. Master of Science in Statistics | Montana State University – Bozeman

August 2021 - May 2023

- 3.92 GPA
- Factor Analysis of Mixed Data for Credit Risk Analysis: Thesis

3. Bachelor of Science in Actuarial Science | Kwame Nkrumah University of Science and Technology – Ghana | September 2015 – May 2019

- Survival Analysis Methods on Life Insurance: Thesis
- 3.93 GPA

ACCOMPLISHMENTS

- Outstanding Graduate Student Excellence Awards *Spring 2024*
- Prudential Life Awards for Top Graduating Students Recipient *2019*
- President (Youth Ministry)- Faith Outreach Ministry, Ghana *Aug 2017-Aug 2021*
- Educational Committee Chairman- ASSA, KNUST *June 2017-May 2018*

SKILLS

- Data Analysis and Visualization
- Advanced Mathematical Concepts
- Programming (VBA, R, Python, Power BI, SQL)
- Teamwork and project management
- Strong communication skill
- Machine Learning

VOLUNTEER

VOLUNTEER ACTIVITIES *2014-2019*
Compassion International Ghana Position: Volunteer Teacher and IT Technician.