Sheriff Alidu

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Accra, Ghana

EDUCATION

Western Michigan University Anticipated Graduation Date: April 2025

Master of Science, Statistics (Data Science) Michigan, United States Relevant Coursework: Big Data Analysis with Python, Machine Learning System Design, Advanced Data Mining with R, Linear & Mixed Models

Activities and Societies: The Data Science Club at Western Michigan University

University of Ghana August 2018 – September 2022

Bachelor of Arts, Mathematics and Statistics

Relevant Coursework: Data Structures & Algorithms, Data Mining, Software Engineering Activities and Societies: Google Developer Students Club

TECHNICAL COMPETENCIES

Programming: Python (Pandas, Scikit-Learn, Django, PyTorch), R, SQL, Java, SageMath

- Machine Learning and Statistical Modelling: Regression, Classification, Decision Trees, Deep Learning, Reinforcement Learning, Clustering
- **API:** RestAPI
- **Cloud**: Azure, Google Cloud Services (GCP), Amazon Web Services (AWS)
- **Data Visualization**: Matplotlib, Power BI, Tableau

EXPERIENCE

Western Michigan University August 2023 – Present **Graduate Teaching Assistant, Statistics** Michigan, United States

Conducted lab sessions to help 30+ students with R and SAS to analyze real-life datasets and draw meaningful statistical conclusions

- Taught Business Statistics class of 20 Aviation and Business majors covering topics in data visualization, confidence intervals, hypothesis testing and linear
- regression with practical applications Coordinated class projects of 20 undergraduate students by ensuring statistical analysis was effectively translated into solving problems and making business recommendations
- Graded assignments and held office hours weekly to assist students with additional needs and support

Ernst & Young (EY) October 2022 – July 2023 Accra, Ghana

Assurance Data Analyst

- Performed data analysis of 10+ financial statements of audit clients using Python and MySQL to draw insights Enhanced data quality and accuracy by 30% through the adaptation of recommended data cleaning techniques
- Developed dashboards with Tableau and presented findings and recommendations to audit managers, clients and other key stakeholders to improve decisions
- Assisted in conducting audit and due diligence for clients, including a more than \$10m European Union grant to local Ghanaian NGOs and audit was ranked among the top 4 audits for the 2022/23 financial year at EY Africa

PESONAL PROJECTS

Multinomial Logistic Regression Using Biological Datasets for Classification of food types for diabetic patients [link]

- Developed a multinomial logistic regression model in Python to classify whether a diabetic patient eat more, less or moderate of a specific food item
- Achieved 79% F1-score by tuning the model with regularization techniques and encoded categorical variables to numeric data types through feature engineering
- Translated statistical and data analysis results into recommending food types for patients with diabetes

Evaluating Players Based on Valuing Actions on Estimating Probabilities

- Built decision tree models to rate and rank player performance at the 2018 FIFA World Cup based on the theory of Valuing Actions on Estimating Probabilities using event data from Wyscout
- Utilized Matplotlib and Seaborn package in Python to visualize player actions on football pitch

Probabilistic modelling of the random walks of robots

- Developed a random walk algorithm to simulate the movement of an unbiased robot using Python libraries like Numpy, Pandas and Matplotlib
- Analyzed the algorithm to determine the average number of hops needed for the robot to reach the boundary and return to the origin with directional probabilities

Modelling the state-of-health of lithium-ion batteries in using random forest regression (Undergraduate thesis with grade A)

- Implemented a random forest regression using R to predict battery health life of vehicles with lithium-ion batteries
- Achieved a minimal error rate 0.026 indicating a high model accuracy by implementing data modelling and statistical analysis techniques
- Effectively communicated findings to 100+ faculty members and other non-technical audience

LEADERSHIP & VOLUNTEERING ACTIVITIES

Team Leader, EY Future Skills

- Demonstrated leadership by supervising a team of 10, including senior managers and associate directors to undertake corporate social responsibilities for the firm
- Provided mentorship and financial literacy skills to 4 high school students in order to aid them to achieve academic and personal growth

General Secretary, The Mathematics Society of Ghana

- Led the society to partner with 5 local firms to provide internship and scholarship opportunities for mathematics students in Ghana.
- Developed the interest of 100+ students in mathematics through the organization of hackathons, career fairs and exchange program awareness

PROFESSIONAL MEMBERSHIPS

The American Statistical Association

Undergoing regular trainings on modern statistical practices in industry and academia for consistent professional development

AWARDS

- Graduate Assistantship Scholarship Award (2023)
- Ernst & Young Full Scholarship Award (2019)