FRANCIS BOATENG

(561) 599-3198 • fboateng2022@fau.edu • www.linkedin.com/in/francis-boateng • Boca Raton, FL 33486

OBJECTIVE

I'm a data science enthusiast skilled in statistical programming, machine learning, and data visualization looking for a Data Science Analyst II role. I'm passionate about deriving actionable insights from data-building algorithms and committed to continuous learning to tackle new challenges effectively.

EDUCATION

Master of Science in Mathematics (Expected May 2024)
Florida Atlantic University, Boca Raton, FL
Cumulative CGPA: 3.83/ 4.0

Bachelor of Science in Actuarial Science (September 2021)
Kwame Nkrumah University of Science and Technology, Kumasi Ghana
Cumulative Weighted Average: 76.65/ 100

TECHNICAL SKILLS

Programming: R, Python, SAS, Minitab, PostgreSQL, SQL, Large Data Set query
Business Analytics: Database Management, Statistical Analysis, Data Analytics, Data Accuracy, Tableau, Power BI
Office Suite: Proficient in Microsoft Office Suite, especially Excel, including VBA, PowerPoint, and Word
Others: Technical Assistance, Logical Analysis.

RELEVANT WORK EXPERIENCE

Graduate Research and Teaching Assistant, *Florida Atlantic University*, Boca Raton, FL (August 2022 - Present)

- Under Dr. Li's supervision, head circumference of babies in pregnant women was analyzed using multiple linear regression, resulting in 89.54% predictability with a low infant birth weight dataset.
- Instructs Methods of Calculus (MAC 2233-16B) course to 45 undergraduate students.
- Grades assignments and homework for over 40 undergraduate students while providing personalized support and fostering a supportive learning environment at the Math Learning Center, assisting students with math and statistics problems.

Actuarial Analyst, *StarLife Assurance*, Accra Ghana (October 2021 – July 2022)

- Retrieved, reviewed, cleaned, transformed, and modeled data for an experience analysis. The findings showed pricing and valuation adjusted mortality rate at 65% and AIDS rate at 10% for fiscal year 2022.
- Prepared data for assessing the company's actuarial liabilities and generated a premium summary by products, distribution channels, and regions, revealing that 55% of premium revenue stemmed from endowment products.
- Utilized Basys, an in-house actuarial software, to accurately calculate a competitive premium rate for an innovative insurance product tailored to market women.

RELEVANT PROJECTS AND RESEARCH EXPIRENCE

Stroke Data Analysis with R-Shiny

- Performed in-depth exploratory data analysis on a stroke dataset, crafted a predictive machine-learning model, and designed an interactive R-Shiny app with three tabs: one for dataset statistics, another for custom visualizations and inferences, and a third for predicting stroke occurrence using a generalized linear model (GLM). Explore the Shiny app here (Stroke Dataset Analysis (shinyapps.io)).

Dimensionality Reduction

- Applied principal component analysis (PCA) to an NBA dataset in R, revealing insights through data investigation. I utilized a biplot that visually demonstrated that 90% of players with the same position clustered at the same point and the dispersion of players with different positions.

Data Analysis of Diamond Attributes: Cut, Carat, and Price

- Analyzed intricate links among diamond qualities: cut, carat, and price. Utilized regression and visuals to unveil key trends. Results highlighted carat weight and cut's significance in pricing. The model's R-squared of 0.8565 showed 85.65% predictability in diamond prices via carat and cut.