

Personal Statement

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In 2018, I was admitted to the University of Ghana based on my strong academic performance and decided to study Economics, Mathematics, and Statistics. However, due to my strong affinity for Mathematics and Statistics, I chose to focus on these two subjects. As a result, I have been introduced to the R and Python programming languages, which I have been able to apply in several projects. My passion for statistics is driven by its predictive power, and I hope to one day make significant contributions as a data scientist. Furthermore, I envision the establishment of a firm that combines the expertise of developers, engineers, and project managers to help solve societal problems through technology. I believe that pursuing a graduate degree in statistics for two years would provide me with the necessary foundation and deep understanding to achieve these goals.

My thesis, titled "Classification and Prediction of Heart Diseases Using Machine Learning Algorithms," reflects my passion for statistics and technology. The goal of this project was to identify the most effective machine learning algorithm for predicting heart diseases by using various algorithms including Logistic Regression, K-Nearest Neighbor, Support Vector Machine and Artificial Neural Networks. The data was sourced from the UCI heart disease repository, and the analysis was conducted using the Python programming language. The K-Nearest Neighbor algorithm was found to be the most effective. I intend to continue exploring the use of different machine learning algorithms in predicting heart diseases in the future.

I have also undertaken several courses in my undergraduate program, including Linear Algebra, Calculus 1, 2 and 3, Probability, Estimation, Hypothesis Testing, Multivariate Methods, Differential Equations, and Inferential Statistics, which have sharpened my analytical and intellectual abilities. This, coupled with various work experiences in different industries, have prepared me well for a career in data science. My experiences range from working as a front desk representative, where I assisted new customers with inquiries and account creation, to serving as a sales executive at Bloop Global, where I managed two social media handles and wrote four articles for the company's website.

Furthermore, I have actively participated in extracurricular activities related to my chosen field of study. As a volunteer and mentor for Teens in AI, I have been actively involved in teaching teenagers about coding. I am also a Local Organizer for Ghana's local event for teens, where I am collaborating with a colleague to organize this event in February. I have also attended the Technology Track organized by Black Sisters in STEM where I learned about personal and digital branding. I have served as a facilitator for SuaCode Africa 2.0, which is a program organized by the Nsesa Foundation that helps people across 60 countries learn to code with their phones. I was also selected as a finalist for the first ever UNESCO India Africa Hackathon held in India last year.

I am a recipient of two awards from the Department of Statistics and Actuarial Science, including the Best Course Representative award for the 2020/2021 academic year, and an award from the Head of Department for being the best president to have served the department. I am confident that my background in statistics, technology, and various work and extracurricular experiences have prepared me well for a successful career in data science. I am eager to continue learning and growing in this field and believe that pursuing a postgraduate degree in Biostatistics at University of Connecticut would be the next step in achieving my goals. I am excited about the opportunity to work with esteemed professors and researchers, collaborate with diverse peers, and gain hands-on experience in the field through projects and internships. I am committed to making the most of this opportunity and I am confident that I will contribute meaningfully to the program.

As a matter of fact, my desire to study biostatistics at University of Connecticut is as a result of my willingness to work with distinguished faculty members at the Department of Statistics. I have been impressed by Dr. Kun Chen's interest in machine learning and look forward to exploring more of such projects during my studies.