EMMANUEL BARFO: PERSONAL STATEMENT FOR MSC MATHEMATICS WITH MAJOR IN MATHEMATICAL ANALYSIS- UNIVERSITY OF BERGEN

The potential of man is limitless, this realization can only be made after carefully studying the trajectory of man and taking cognizance of what has happened in the past, to inform what can happen in the future, thereby facilitating the realization of the full potential of man. This sums up my impression about mathematics.

Growing up, I was drawn to ideas and principles that made work easy, save time, energy, and cost. These values were imbibed in me by my mother who ensured that planning for the future and avoiding waste based on data was practiced. She did this by applying a very traditional form of statistics and the use of data. She asked us how many slices of yam or plantain we could eat before preparing the family meals, at a point she knew just how much to cook to avoid waste. Observing my mother do this during childhood ignited my passion for forecasting based on available data.

Owing to this passion, gaining admission to read Actuarial Science at the University of Development Studies in Ghana for my bachelor's was a dream come true. During this period, I was exposed to so many mathematical related courses like Risk Theory, Differential Equations, Stochastic Process, Linear Algebra, Linear Models, Statistical Demography, Real Analysis, Survival Models and many more. As part of my training, I was opportune to acquire basic data analysis skills and experience through the use of analysis software like SPSS and programming using R, to complete projects such as a conducting a community profile for a community that facilitated the provision of community infrastructure as well as completing an undergraduate thesis on what influences adoption of mobile money using factor analysis. I concluded that the main factors that affect adoption of mobile money in Ghana are perceived usefulness, perceived ease of use, perceived trust, perceived risk and social influence.

My first and second-year research experience introduced me to data collection and basic analysis methods when I assisted on a project to draw a community profile for a community.

During my third year vacation, when I interned at Social Security and National Insurance Trust, my data analytical skills were employed to measure the branch performance, monitor and assess agents, and plan strategically in meeting targets.

My love for applying data and sharing knowledge also led me to lead a study group for my peers where I provided support for my colleagues who were experiencing challenges understanding concepts in class, this process not only helped my colleagues but also helped me understand concepts better.

My passion for mathematics does not only lie within academia thus I enrolled in a training program where I learnt the basics of using Python for programming and basic Java and

JavaScript this resulted in my learning at the basic level how to use a computer to program data in ways that reduce the risk of errors.

Currently, I serve as the officer in the debt management unit at Ghana Revenue Authority. Where in this position, I have used data analysis and mathematical models to produce Notice of tax due, Demand notice by using data from previous years to ensure all tax payments are made.

I believe that mathematics has a role to play in the future of production, sales, health, and other sectors of life. I am convinced with the improved mathematical learning models and evolving methods and theories of statistics, making sense of large data and developing computational models will go a long way to manage resources and ensure the effective use of resources in all sectors of life.

My research interest includes making sense of data in Tax mobilization and analysis. I am dedicated to impacting the tax system by making sense of data from Tax payers. This interest reflects in my current role as the officer in the debt management unit where I have employed data analysis and statistical models in helping to draw accurate conclusions on our tax returns for effective mobilization of tax.

I acknowledge that it is essential to gain more knowledge in the field of mathematical analysis thus I am committed to enrolling in a graduate program that facilitates this. I was researching on Graduate programs that meet my needs and I came across the graduate program at University Of Bergen. After a careful review of the course requirements, and the faculty expertise, I observed that gaining graduate education university to read Msc Mathematics with major in mathematical analysis would take me a step towards achieving my career as a Mathematician who specializes in the use of data analysis to inform policy and facilitate the development of communities in diverse spheres of life.

The practical nature of the program and the learning outcome of equipping students with the skills necessary to fully appreciate modern statistical modeling was another interesting factor I could not ignore.

I acknowledge that succeeding in a graduate program goes beyond academic prowess and requires dedication and commitment, attributes which I look forward to exhibit to the best of my ability if granted the opportunity to pursue graduate education at University Of Bergen. I believe that the unique program would be a stepping stone to achieving my career objectives. I am confident that the university would be a fertile ground for me to pursue my career aspirations and I hope my genuine passion coupled with my experience and academic record would facilitate consideration for admission into the MSc Mathematics with major in mathematical analysis.