With a profound commitment to advancing public health through technology, I am eager to join the University of East Anglia's PhD programme in Computing Science. This program aligns perfectly with my career aspirations to harness machine learning and data analytics to transform healthcare delivery in resource-limited settings. My academic and professional journey culminates in the desire to work under the tutelage of Professor Beatriz de la Iglesia and Dr Pinar Guven-Uslu, whose pioneering work in health informatics and performance metrics directly complements my research ambitions.

Over the past five years at the Navrongo Health Research Centre in Ghana, I have managed and analysed extensive health datasets. This experience uncovered a pivotal gap in the utilization of health and demographic surveillance systems (HDSS) data for predictive analytics. Motivated by this challenge, my PhD project aims to innovate on how HDSS data, integrated with operational performance metrics, can forecast and enhance healthcare planning and resource allocation in underserved areas.

The University of East Anglia stands out for its cutting-edge research and interdisciplinary approach, which merges computing science with practical health solutions. This environment is ideal for my project, which seeks to apply machine learning to vital public health issues, producing research that extends beyond academia to tangible societal benefits.

My academic foundation is robust, having graduated with distinction in Information Technology from Bournemouth University. My master's dissertation involved creating an AI-driven tool to demystify online terms of service for users, further honing my skills in data-driven application development and user behaviour analytics. These competencies are vital for my proposed research into developing predictive models and visualisation tools for healthcare.

Professionally, I have spearheaded several projects that improved healthcare delivery by integrating advanced data analysis techniques into public health programs. My efforts in managing vaccine data analysis have informed national health strategies and supported the introduction of new vaccines. I have also published extensively on public health challenges and data science solutions, demonstrating my commitment to impactful scientific communication.

I am driven by a vision to bridge the significant gap between data potential and healthcare outcomes in regions that most need innovation. By developing tools that provide actionable insights, I aim to empower policymakers and healthcare providers to make informed decisions that enhance health equity.

I am enthusiastic about contributing to and growing within UEA's vibrant academic community. The opportunity to collaborate with esteemed experts and engage in high-impact research will undoubtedly enrich my skills and drive advancements in global public health.

Thank you for considering me for a PhD. I look forward to joining UEA and contributing to groundbreaking research that promises not only to advance knowledge but also to deliver real-world benefits.