LEWIS MOMANYI NYAKARU

Software Engineering Internship

April 20, 2025

Center for Epidemiological Modelling and Analysis (CEMA)

University of Nairobi Nairobi, Kenya

Dear CEMA Recruitment Team,

I am writing this letter to express my interest in the position of Software Engineering Intern as advertised on the Centre for Epidemiological Modelling and Analysis (CEMA) website on the 21st of April 2025. It is a great pleasure to apply for this position as I am a final year student currently studying BSc Computer Science and Mathematics on Kenyatta University. I would like to be part of the team that works to improve the health of Kenyans and Africans through data-driven models.

My technical background and project experiences align strongly with the responsibilities outlined for the Software Engineering Intern position:

Web Application Development: I have constructed and launched numerous web applications utilizing leadingedge technologies such as React, Vite, and a variety of backend frameworks. The development of the Soma App and Information Management System provides evidence of my ability to deliver user-friendly interfaces for data visualization and analytics tools, which could be highly beneficial for CEMA's health data initiatives.

Full-Stack Development: I can be a valuable addition to your web projects and server upkeep by offering diverse knowledge in both front-end (React, HTML, CSS, Tailwind CSS) and back-end (Node & Express, Django, Flask) development as well as database administration (MongoDB, SQL, PostgreSQL).

Data-Focused Applications: My experience in Crypto Tracker Project demonstrates that I can process real-time data and make available interactive visualization, which is essential for the analytics of such kind of data as health data. In addition, I have IBM Data Science Practitioner Certificate, and my analytics and visualization skills can be useful for CEMA's epidemiological studies.

Experience with Containers: I have a considerable understanding of Docker and its usage for containerization in numerous projects. This experience could be beneficial for ensuring the safety and effectiveness of CEMA's digital infrastructure.

The prize-winning Information Management System I developed for Kenyatta University's labs showcases my ability to develop solutions that manage resources, monitor inventory, and enable collaboration—abilities that would translate well to helping CEMA with its digital infrastructure and data management needs.

I am very interested in CEMA's interdisciplinary approach and the cross point between technology and public health challenges. I see the possibility to apply my software engineering skills in a manner that will have a

direct impact on health outcomes across Africa as completely suitable for my career objectives.

I am available to begin on the anticipated date of June 3, 2025 and can commit to the of the internship. I am available to discuss how my skills and experience can benefit	
Sincerely,	
	Lewis Momanyi Nairobi