



UNIVERSITY OF NAIROBI

EXTERNAL JOB VACANCIES (PROJECT POSITION)

Applications are invited for the following position:

SOFTWARE ENGINEERING RESEARCH ASSISTANT - CENTER FOR EPIDEMIOLOGICAL MODELLING AND ANALYSIS – AD/5/24/2025, 1 POST

The Position Description

The Center for Epidemiological Modelling and Analysis (CEMA) at the University of Nairobi is looking to appoint **Software Engineering Research Assistant** with passion and skills in software engineering, data analysis and visualization as applied to health.

About CEMA

CEMA is a Center of Excellence at the University of Nairobi bringing together a multidisciplinary consortium of epidemiologists, infectious disease specialists, medical and veterinary health professionals and clinicians, mathematicians, statisticians, computer scientists, software engineers, economists, and data scientists to harness data-driven approaches for controlling infectious diseases and advancing public health in Kenya and across Africa.

Established in 2020, CEMA's work has guided responses to the COVID-19 pandemic and other disease outbreaks and health crises, advanced the control and elimination of neglected tropical diseases across African countries, provided insights to optimize health programs and improve health outcomes, and provided training in quantitative skills to analyze health data and address critical public health challenges in Africa. CEMA is supported by multiple funding agencies including the Gates Foundation, Coalition for Epidemic Preparedness Innovations, the Wellcome Trust, among others.

Duty Station: Center for Epidemiological Modelling and Analysis, located at the University of Nairobi Institute of Tropical and Infectious Diseases, Nairobi, Kenya.

Reporting to: CEMA Co-Directors

Position Responsibilities

- Writing, debugging, and maintaining code using relevant programming languages and frameworks
- Evaluating software performance, usability, or reliability based on specific research goals
- Extract, organize, store and catalogue large health datasets from multiple sources
- Analyzing data using tools like Python, R, Excel, or custom scripts to extract meaningful insights
- Develop dashboards to visualize trends in health data
- Assist in the design, implementation, and testing of systems related to CEMA's research, such as machine learning models, software applications, or computational simulations

- Set up and running controlled experiments, simulations, or tests to validate hypotheses or evaluate algorithms
- Developing or improving tools for research use, such as code analysis tools, visualization dashboards, or automation scripts
- Mentor undergraduate students and recent graduates taking internships at CEMA

Position Requirements

- Bachelor's degree in Software Engineering, Computer Science, Information Technology, Information Systems, or Web Development
- Demonstrated experience developing high quality dashboards in R (provide links to deployed apps)
- Demonstrated experience working with health and health related data (provide links to GitHub accounts showing completed projects)
- Demonstrated possession of quantitative skills (statistical analysis and/or modelling)
- Experience working within academic settings and linked to addressing policy-relevant analytical questions
- Excellent computer skills and familiarity with R statistical software
- Excellent communication (written and spoken) and interpersonal skills

Terms of Appointment

The appointment will be on a one (1) year contract, renewable subject to performance and availability of funds. The successful candidate will enjoy a competitive salary based on their qualifications and experience. In addition to a fulfilling and challenging role, they will receive a comprehensive benefits package, including health insurance, leave allowance, and opportunities for professional development.

NOTES

1. Applicants should email their application letters, certified copies of certificates and curriculum vitae (CV) giving details of their qualifications, experience and three (3) referees, as well as indicating their Github accounts which showcase their projects, telephone and e-mail contacts.
2. Applications and related documents should addressed to the Director, Human Resource, University of Nairobi.
3. Applicants should state their current designations, salaries and other benefits attached to those designations.
4. The application letter must bear the reference code indicated in the advertisement.
5. Late applications will not be considered.
6. Applications should be emailed as one file in PDF to: recruit-softengiRA@uonbi.ac.ke

CLOSING DATE: JUNE 4, 2025

**THE UNIVERSITY OF NAIROBI IS AN EQUAL OPPORTUNITY EMPLOYER
ONLY SHORTLISTED APPLICANTS WILL BE CONTACTED**