UNIVERSITY OF MAURITIUS



VACANCIES

The University of Mauritius aims at developing a Local Climate Resilient Framework to floods in cities using satellite images. As cities grow quickly, the risk of floods increases, both during cyclones and heavy rainfall events. Satellite images and computer models, have been extensively applied to similar studies. This particular research will be able the tracking of urban expansion to develop better ways to manage flood risks. The goal is to provide useful tools for decision-makers and train local experts in satellite and mapping technology to support safer and more sustainable urban planning.

In this context, applications are invited from suitably qualified candidates for the post of *two (2)* Research Assistants (Part-Time), to work on the project entitled "Developing a Climate Resilient Framework for development in flood prone areas using Geospatial technology and Earth Observation Data". The identified tasks and their respective expected duration and remuneration are as follows:

POST 1: RESEARCH ASSISTANT 1

Tasks - (Rs 50,000)

Expected duration: 3 months

- Conduct a comprehensive literature review of climate resilient frameworks.
- Propose a climate resilient framework for Mauritius.
- Conduct focus group discussion and a validation workshop with relevant stakeholders.
- Report to investigators on a regular basis.
- Write a comprehensive report for the project.
- Write a technical paper.
- Any other cognate duties.

Minimum Qualifications Required for Post 1:

- Degree in Geomatics (or related fields), or
- Degree in Town and Country Planning (or related fields)

Profile of Candidates for Post 1:

Candidates must have:

- Knowledge of climate resilience, and earth observation data.
- The ability to conduct research.
- Good communication and report writing abilities.
- Experience in organising workshops and stakeholder engagement

POST 2: RESEARCH ASSISTANT 2

Tasks - (Rs 50,000):

Expected duration: 3 months

- Acquire satellite images for Mauritius from relevant platforms.
- Extract relevant information from satellite images.
- Use satellite images for drought and flood assessment.
- Report to investigators on a regular basis.
- Write a comprehensive report for the project.
- Write a technical paper.
- Any other cognate duties.

Minimum Qualifications Required for Post 2:

• Degree in Computer Science or related fields

Profile of Candidates for Post 2:

Candidates must have:

- Knowledge of satellite imagery and remote sensing.
- Good programming skills in Python.
- Knowledge of computer vision, machine learning and artificial intelligence
- Good communication and report writing abilities

Duration of Contract

Appointment for each post will be offered for a contractual period of **three (3) months**. The proposed starting date for each post will be **1**st **April 2025**.

Mode of Application

Letter of application together with a detailed *Curriculum Vitae* and photocopies of qualifications, birth certificate, marriage certificate (if applicable), testimonials and equivalence of qualifications (where applicable) should reach the Dean of the Faculty of Engineering (Attention: Associate Professor (Dr) Manta Nowbuth as Principal Investigator), University of Mauritius, Réduit OR PREFERABLY by email to mnowbuth@uom.ac.mu and deanfoe@uom.ac.mu by Friday, 14 th March 2025, at latest by 2pm.

The envelope (for the hardcopy, if any) and the email subject should be clearly marked "Post 1: Research Assistant 1 - Developing a Climate Resilient Framework for

development in flood prone areas using Geospatial technology and Earth Observation Data" or "Post 2: Research Assistant 2 - Developing a Climate Resilient Framework for development in flood prone areas using Geospatial technology and Earth Observation Data". Note that a candidate can apply for both posts via separate applications. However, he/she will be recruited for only one post if selected.

Incomplete applications or those received after the closing date will **not** be considered.

The University reserves the right:

- to call for interview only the most appropriate and best qualified applicants,
- not to make any appointment as a result of this advertisement

Dean, Faculty of Engineering Date: Tuesday 28 February 2025