UNIVERSITY OF MAURITIUS

VACANCY

Applications are invited from suitably qualified candidates for the post of **Research Assistant**, for a **task-based assignment** to work on the research project entitled "**PV Power Forecast derived from Solar Irradiance Prediction Framework using Artificial Intelligence Techniques**" for a contractual period of six (6) months.

Qualifications Required:

- A degree in Mathematics, Physics, Electrical/Electronics/Mechanical/Mechatronics Engineering, Applied Computing, or equivalent.

Profile

Candidates must have:

- Strong background in machine learning and deep learning techniques, (with practical project experience preferred).
- Proficiency in Python (TensorFlow, PyTorch, scikit-learn) or MATLAB (Deep Network Designer).
- Experience with time series forecasting, data analysis, and model evaluation.
- Knowledge of photovoltaic and renewable energy systems.
- Excellent analytical, problem-solving, and communication skills.
- Strong interpersonal and teamwork abilities.

Task 1: Data Collection and Pre-processing

- Assist in compiling PV output and meteorological datasets from field and secondary sources.
- Clean and format data for consistency and quality.
- Conduct basic summaries and visualizations of raw data.

Task 2: Dataset Structuring and Documentation

- Organize datasets into standardized formats for model input.
- Prepare data documentation, including metadata and data quality notes.
- Maintain proper records and archiving of all datasets.

Task 3: Field and Data Verification Support

- Support field visits and data verification activities as required.
- Cross-check data with secondary sources for accuracy.
- Assist in preparing progress updates on data collection.

Remuneration

For Task 1: an all-inclusive allowance of Rs 75,000/- **upon satisfactory completion**
For Task 2: an all-inclusive allowance of Rs 100,000/- **upon satisfactory completion**
For Task 3: an all-inclusive allowance of Rs 50,000/- **upon satisfactory completion**

Duration of Contract

For the task-based assignment (including Tasks 1, 2 and 3) appointment will be offered for a contractual period of six (6) months. The tentative starting date will be 18 August 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 be sent **by email** to Dr Abdel Khoodaruth (a.khoodaruth@uom.ac.mu) and copied to the Dean of Faculty of Engineering (deanfeng@uom.ac.mu) by **Noon (12:00 PM),** on ***08 August 2025*****, at latest.**

The email subject should read **"Research Assistant for the Project: PV Power Forecast derived from Solar Irradiance Prediction Framework using Artificial Intelligence Techniques"**. Applications 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.
- To conduct a written/aptitude test as and when required.

22 July 2025

Assoc Prof (Dr) B Y R Surnam
Dean, Faculty of Engineering