



VACANCY

Applications are invited from suitably qualified candidates for the post of **Research Assistant (Part-Time)**, for a **task-based assignment** to work on the research project entitled *“InTraMs - Intelligent Traffic Management System”*, for a contractual period not exceeding **two (2)** months.

The identified tasks and respective remuneration are as follows:

Task 1: Data preparation (Rs 20,000)

- Collect and organize data from various sources.
- Clean and preprocess the data to remove any noise or inconsistencies.
- Split the data into training, validation, and test sets.
- Convert data into appropriate formats for model training and testing.
- Any other cognate duties.

Task 2: Model development and training (Rs. 55,000)

- Improve the existing CNN model by exploring different architectures and modifying layers, filters, or activation functions, to enhance the model performance.
- Evaluating the model performance on different datasets.
- Compiling the model with appropriate loss functions, optimizers, and metrics.
- Training the model on training and validation datasets.
- Tune hyperparameters using validation data set to optimize model performance.
- Regularizing the model to prevent overfitting.
- Any other cognate duties.

Task 3: Technical Documentation and Report Writing (Rs. 10,000)

- Document all steps involved in data preparation and model development.
- Generate reports to summarize model performance and results.
- Prepare project reports and presentations for the research team and stakeholders.
- Provide recommendations for future work.
- Any other cognate duties.

Qualifications Required

- Degree in Computer Science, Applied Computing, Software Engineering or any equivalent qualification.

Profile

Candidates must have:

- Very good programming skills
- Good experience in computer vision and Deep Learning models
- Web development skills
- Good analytical and communication skills

Duration of Contract

Appointment will be offered for a contractual period of a maximum of **2 months**. The tentative starting date will be **Monday 8 May 2023**.

While the recruited candidate(s) will **NOT** be expected to be on site on a daily basis, arrangements should be made to attend weekly meetings with the research team on the University of Mauritius campus.

Further Information and/or Clarification

Any request for further information and/or clarification should be directed to Dr. Oomesh Gukhool via email (o.gukhool@uom.ac.mu) with subject line: "Request for information/clarification on ***InTraMs - Intelligent Traffic Management System*** project".

Mode of Application

Letter of application together with a detailed Curriculum Vitae (C.V) and photocopies of qualifications, birth certificate, marriage certificates (if applicable), testimonials and equivalence of qualifications (where applicable) should reach **the Dean of Faculty of Information, Communication and Digital Technologies (FoICDT), (Attention: Dr O.Gukhool), University of Mauritius, Réduit OR **PREFERABLY**** by email at o.gukhool@uom.ac.mu and copied to deanfoicdt@uom.ac.mu (Dean, FoICDT), by **1 May 2023**, at latest.

The envelope should be clearly marked ***InTraMs - Intelligent Traffic Management System - CNN*** on the top right-hand corner, or if your application is sent by email, your email subject should be same as the aforementioned description.

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.