Date: 15/02/2022

Opening for a research assistant position to work on digital twin for pipeline flow

Applications are invited for a research assistant position to work on "Digital Twin for pipeline transport network". This is part of an Indo-Dutch project, where IISc (India), CWI (Netherlands), and Shell (Netherlands) collaborate.

As part of the project, we set up a digital twin for a pipeline network using a network of IoT sensors, the data collected from the sensors would be used to train an intelligent data-driven model to predict, in advance or real-time, the occurrence and location of leaks in the pipeline network.

The candidate needs to integrate the sensors' data into advanced analytical models (machine learning) to predict the leakages.
- As a data-driven model mimics a physical process, affinity towards modelling of flow in pipeline network would be a plus.
- The applicant needs to be strong in programming, preferably Python, R, or C++.
- The applicant should have a strong working knowledge of **ArcGIS**.

The remuneration for the position is as per the institute norms.

Required qualifications/skills are as follows:
- BTech/BS(Research)/MTech/MS in Engineering with experience in computing and data analytics.
- Understanding linear flow models in the pipeline network, such as ones used in EPANET, is a plus.
- Good expertise in numerical programming, code parallelisation, managing servers.
- Excellent writing and communication skills.

The applicant will be expected to make independent and rapid progress.

Those interested are encouraged to submit their bio-data and a cover letter by email to **parthar@iisc.ac.in** with the subject "Application for the RA Position for the DPTrans project".

Selection Method: Candidates will be shortlisted based on Bio-Data evaluation, followed by an online MS-teams based interview for final selection.

The initial appointment of the selected candidates will be for three months, which will be extended for the rest of the project duration upon satisfactory performance.

The last date of receipt of the application is **1-03-2022**. In case of insufficient response, applications received later will also be considered.

For informal queries on the position and the project, contact Dr Shashi Jain (shashijain@iisc.ac.in) / Prof Parthasarathy Ramachandran (parthar@iisc.ac.in).