INDIAN INSTITUTE OF TECHNOLOGY BOMBAY
POWAI, MUMBAI 400076.

Advertisement No.: IRCC/EXT432/2023

Job Title
Project Manager

Job Reference Number
50523008

Application End Date
20.12.2023

Type of Employment
Proj. Staff Contract

No. of Position(s)
2

IITB Project Recruitment:

Project title: Diseases and Interventions Modelling to Action Group (DIMAG)

About the project: IIT Bombay is the anchor organization of a Disease Modelling Consortium. The consortium will house a secretariat and partner with various institutions for the disease modelling work. The disease modelling consortium will serve as a domestic institutional set-up for supporting policy & programmatic decisions on infectious diseases through transmission and system modelling. Their modelling work will act as a bridge between control & elimination of infectious diseases and strengthening integrated disease surveillance.

The main objectives of the consortium are to:
-    To build an institutional nucleus for the country's disease modelling ecosystem, capacities, & capabilities to grow
-    To generate sub-national disease burden and impact estimates
-    To guide disease prevention interventions dynamically in focus geographies
-    To measure progress and evaluate the performance of the various disease control and elimination programmes through disease modelling
-    To train future modellers through various programs and workshops

Essential Qualifications & Experience:
PhD
OR
MTech/ME/MDes or equivalent degree with minimum 4 years relevant experience
OR
BTech/BE/MA/MSc/MCA/MBA or equivalent degree with 6 years relevant experience

Job Profile:
A.   The project manager will be responsible for interfacing with PIs and RAs from various backgrounds .
B.   Require experience in the mathematical modelling of infectious diseases, in particular with compartmental/metapopulation models, and with proficient knowledge of a computer programming language, such as R, MATLAB or Python. These models will be used for prediction/forecasting of disease burdens under different interventions. The project manager should facilitate data mining for structural/functional trends across diseases, treatments, geographical and temporal variations.
C.Disease modelling will very often require the use of computing using

(i) multiple cores/CPUs
(ii) distributed systems or clusters and
(iii) GPUs. So expertise in the use of distributed computing at one or more of different levels of granularity using appropriate paradigms such as MPI (for multi-core), CUDA Programming (for GPUs) and Map-Reduce (for distributed systems) is highly desirable.

D.   The project manager will also be responsible for maintaining and managing the health data repositories while ensuring both privacy and security. Care should be taken to ensure that the data made available for analysis has no information that could be used to identify an individual (i.e., is de-identified). Further, the project manager should be capable of de-identifying the data suitably as and when required. Also, the project manager should preferably have some exposure to federated data management.

E.   To ensure data safety, the project manager should be familiar with data storage virtualization technologies (such as RAID) at least at the software level. The project manager will be working on protecting health data and fixing glitches that may slow down the exchange of data or corrupt its accuracy.

F.   Clear communication of modelling results as reports to various agencies. Help in paper writing. Knowledge of Word and Latex required.

Pay Details:
Level PR-O2: Salary range from Rs.42000 to Rs. 84000 + Rs.7500.00/- Out Of Campus Allowance (if applicable) p.m.

General information:
The position is temporary for a period of 1 year and tenable only for the duration of the project. The appointment is for time bound project and the candidate is required to work mainly for the successful completion of the project. The selection committee may offer lower or higher designation and lower or higher salary depending upon the experience and performance of the candidate in the interview.

Candidates called for interview will be required to attend at his/ her own expenses.

For any queries/clarification please contact: recruit@ircc.iitb.ac.in