

INDIAN INSTITUTE OF TECHNOLOGY BOMBAY POWAI, MUMBAI 400076.

Advertisement No.: IRCC/EXT134/2022

Job Title Project Associate - I

Job Reference Number 50342736

Application End Date 22.07.2022

Type of Employment Proj. Staff Contract

No. of Position(s)

IITB Project Recruitment:

Project title: Algorithms and software for mixed-Integer Quadratically constrained Optimization

About the project: The project envisages to develop a new global solver for MIQCO in the open-source software framework Minotaur. The focus is on developing practical algorithms that are robust and fast so that they can be deployed to solve medium to large scale problems, and at the same time, be easily extendible so that they can be modified for very large scale problems arising in specific applications. The proposed work includes schemes for an efficient branch-and-cut algorithm and parallelization on shared-memory systems. The work is expected to result in novel and practical algorithms for MIQCO and an open-source solver that can be used by researchers and industry experts. More details are available on this page:

https://www.ieor.iitb.ac.in/node/2673

Essential Qualifications & Experience:

Masters Degree in Natural or Agricultural Sciences / MVSc or bachelors degree in Engineering or Technology or Medicine from a recognized University or equivalent

who do not fall under following

(i) Scholars who are selected through

(a) National Eligibility Tests - CSIR-UGC NET including lectureship (Assistant Professorship) or GATE or

(b) A selection process through National level examinations conducted by Central Government Departments and their Agencies and Institutions.

Job Profile:

The associate is expected to work with the Project Investigator and the Minotaur development team. They will help in implementing, testing, debugging and documenting the solver. They are expected to collaborate with the team in co-authoring papers for journals and conferences. They will also help in demonstrating the use of the solver and helping potential users.

General information:

Age limit 35 years.

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