



INDIAN INSTITUTE OF TECHNOLOGY BOMBAY POWAI, MUMBAI 400076.

Advertisement No.: IRCC/EXT223/2022

Job Title

Project Engineer

Job Reference Number

50362525

Application End Date

11.10.2022

Type of Employment

Proj. Staff Contract

No. of Position(s)

3

IITB Project Recruitment:

Project title: Next Generation Wireless Research and Standardization on 5G and Beyond

About the project: The fifth generation (5G) technology is identified to have the potential to make a major societal transformation in India by enabling massive digital products and services across industrial, commercial, education, health care, environment, agricultural, financial, and social sectors. The proposed R&D project is envisaged to contribute to address two of the priorities viz. Technology and Manufacturing identified by the 5G HLF by conducting collaborative standards-based research by tapping the available resource pool spread across the country, and the research outcomes are taken to national and International standardization forums like 3GPP, ITU, and TSDSI for its adoption.

All the eight institutes agreed to submit the collaborative proposals contained herein to MEITY for funding to continue the 5G R&D activities in Next Generation Wireless Research and Standardization on 5G and Beyond project for a duration of four years with prime focus on standards-based research and participation in International standards along the recommendation of the task force setup by the steering committee constituted by the 5GHLF. The activities and outputs from this project will contribute to unlock the transformative power of digital communication networks to achieve the goal of GoI in enhancing the well-being of the people through digital empowerment as set out in the draft National Digital Communication Policy 2018 (NDCP 2018).

Given below are IIT Bombay deliverables:

- Use cases, Architecture and protocols for Frugal 5G Networks
- Architecture and protocols for wireless backhaul and Relay communication
- Algorithms for resource allocation and loss tolerance in multicast communication
- Algorithms for resource allocation in mmWave networks
- Proposals for standardization to IEEE and 3GPP
- Prototypes and Simulators
- Training and workshops for industry/academic institutions.

Essential Qualifications & Experience:

B.Tech or equivalent with 2-3 Years of experience.

OR

M. Tech or equivalent with 1-2 Years of experience in CSE/ ECE.

Must have strong software development skills in C/C++. Must have experience building software for wireless/networking applications. Must be comfortable with software development and debugging on Linux, and in virtualized environments. Understanding of 3GPP standards (e.g., LTE and 5GS), is highly desirable. Python development skills desirable.

Job Profile:

- Candidate must be able to work independently or with minimal supervision.
- Candidate must be able to contribute to coding/integration/system debug activities for the development of state-of-art technology.

Pay Details:

Level PR-O1: Salary range from Rs.33600 to Rs 67200 + Rs.6250.00/- 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