



INDIAN INSTITUTE OF TECHNOLOGY BOMBAY POWAI, MUMBAI 400076.

Advertisement No.: IRCC/EXT007/2023

Job Title

Project Research Scientist

Job Reference Number

50388003

Application End Date

17.02.2023

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 Govt 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:

PhD in the area of CSE/ECE.

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.

Skill requirement:

- Excellent oral and written communication skills including presentation skills.

- Self-motivated and driven to exceed goals and willingly make decisions.
- Should have strong research aptitude and understandings of wireless and digital communication.
- Experience of publishing papers in international journals and conference proceedings.
- Understanding of 3GPP standards (e.g., LTE and 5GS), is highly desirable.

Job Profile:

- Must take up independent research threads within the broad domain of 5G and beyond mobile networks ensuring delivery of project deliverables in collaboration with other team members.

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