

DATED: 25.07.2025



INDIAN INSTITUTE OF TECHNOLOGY PATNA BIHTA PATNA-801106 RESEARCH & DEVELOPMENT UNIT

ADVERTISEMENT NO: R&D/1267/DOI/502 Project No: **R&D/SP/EE/DoI/2025-26/1267**

Applications are invited in the prescribed format only for the following assignment in a purely timebound research project undertaken in this institute.

1. (a) Name of the temporary assignment: Research Engineer

(b) Number of Post:

(c) Duration of the Post: Initially 1 year and can be extended up to 1 more year subject to satisfactory performance

2. (a) Name of the temporary assignment: Junior Research Fellows (JRF)

(b) Number of Post:

(c) Duration of the Post: Initially 1 year and can be extended up to 1

more year subject to satisfactory performance

3. (a) Name of the temporary assignment: Research Intern

(b) Number of Post:

(c) Duration of the Post: Initially 1 year and can be extended up to 1

more year subject to satisfactory performance

- 4. Name of theresearch project: Design and Optimization of Initial Access Procedure and Beam Management for 6G Networks Based on Artificial Intelligence and Machine Learning
- 5. Name of the sponsoring Agency: Telecom Technology Development Fund (TTDF), Department of Telecom (DoT), Government of India
- 6. Fellowship/Salary:
 - (a) Research Engineer: Rs 75,000/- Plus 8% HRA as per rules per month
 - (b) JRF: Rs 40,000/- Plus 8% HRA per month
 - (c) Research Intern: Rs 25,000/- per month
- 7 .Qualifications& Experience:
- (a) Research Engineer: The candidate should hold a B.Tech degree in Electronics and Communication Engineering (ECE) and an M.Tech degree in ECE or Computer Science (CS) with a minimum of 60% marks or a CPI of 6.5, along with 4 to 5 years of research or relevant work experience. The upper age limit for applying is 35 years, with relaxations for SC/ST/OBC/Women/Persons with Disabilities (PwD) as per Government of India norms.

Desirable Qualifications and Experience:

- Research experience in AI/ML-based initial access and beam management for Beyond 5G and 6G networks
- Hands-on expertise in implementing algorithms on software-defined radios (SDRs), Strong background in developing and deploying deep learning/ machine learning models for wireless communication systems

Form No: RD-M003



INDIAN INSTITUTE OF TECHNOLOGY PATNA BIHTA PATNA-801106 RESEARCH & DEVELOPMENT UNIT

Candidates with relevant domain experience and a strong research profile will be given preference.

(b) JRF: Candidates must possess a B.Tech degree in Electronics and Communication Engineering (ECE) and an M.Tech degree in either ECE or Computer Science (CS), with a minimum of 60% marks or a CPI of 6.5. The upper age limit is 32 years, with relaxations applicable for SC/ST/OBC/Women/PwD candidates as per Government of India norms.

There are two categories of eligibility for the JRF position:

- 1. JRF with GATE Qualification: Candidates selected under this category may also be considered for Ph.D. admission under the Department of Electrical Engineering, subject to the rules of the institute.
 - A valid GATE score (not older than five years from the last date of application submission) in a relevant discipline is mandatory for this category.
- **2. JRF without GATE Qualification:**Candidates who do not have a valid GATE score are also eligible to apply, but only for the JRF position.
- (c) Research Intern: Candidates from the following backgrounds are eligible to apply:
 - B.Tech in Electronics and Communication Engineering (ECE), Final-year B.Tech students in ECE, Final year M.Tech in ECE/Computer Science (CS)/Artificial Intelligence (AI), M.TechStudents in ECE/CS/AI. Candidates who have already completed their B.Tech or M.Tech degrees must have secured a minimum of 80% marks or a CPI of 8.5.

Eligible and shortlisted candidates are invited to attend the **online interview. The tentative date of the online interview is in the last week of August 2025**. The interview will be conducted via a online link, which will be sharedwith the shortlisted candidates by the Department of Electrical Engineering, IIT Patna, Bihta, Patna – 801106.

All eligible candidates are required to email a single PDF file merging the following documents in the specified order to 6gcfp.dot.iitp@gmail.com:

- 1. An updated resume.
- 2. Soft copies of all supporting documents (including certificates,marksheets, and degree certificates) arranged in descending order.
- 3. The duly filled application form (RD-M003) attached with this advertisement below. Please ensure all documents are submitted well in advance of the interview date. The deadline for sending the requested documents is August 14, 2025 by 11:59 PM. For any query contact Investigator: Dr. Preetam Kumar, Professor, Dept. of Electrical Engineering, IIT Patna, Email:6gcfp.dot.iitp@gmail.com

Asst. Registrar

Copy to:

- 1. Associate Dean, R&D, IIT Patna
- 2. Advertisement file
- 3. Project file

Form No: RD-M003



INDIAN INSTITUTE OF TECHNOLOGY PATNA BIHTA PATNA-801106 RESEARCH & DEVELOPMENT UNIT

PROJECT CODE: R&D/SP/EE/DoI/2025-26/1267

ADVERTISEMENT NO: R&D/1267/DOI/502 DATED: 25.07.2025 FORMAT OF APPLICATION FOR: RE/JRF/RI

Name & Address Including email id and Phone no. (for Correspondence) NAME IN CAPITAL Address:		Category (GEN/OBC/SC/S T/PD)	DOB dd/ mm/yy	Professional Exam. (GATE/CSIR-NET, etc) & Validity	
Phone: Email:					
Educational Qualification	n				
Institute/ Board	Exam Passed		Year of Passing		% of Marks/CPI
	10 th Class				
		th Class chelors			
	l l				
		ech/B.E./BCA) quivalent			
(M.Sc/M.7		lasters			
		ech/M.E/MCA/			
		MA)			
	or e	quivalent			
Qualifying degree		Degree/ major/Specialization		on	
	./BCA)				
(B.Sc/B.Tech/B.E.					
(B.Sc/B.Tech/B.E. (M.Sc/M.Tech/M.					

	Signature of applicant
Date:	
Place:	