



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

**ADVERTISEMENT NO: R&D/993/DIT/367**

**DATED: 10.04.2024**

Project No. R&D/SP/EE/DIT/2023-24/993

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

1. (a) Name of the temporary assignment :Junior Research Fellow  
(b) Number of Post :01 (one)  
(c) Duration of the Post :2 Years
2. Name of the temporary research project :**Design of Intelligent Tactile Internet System for Post 5G Era**
3. Name of the sponsoring Agency:**Science & Engineering Research Board (SERB), Department of Science and Technology, Government of India**
4. Consolidated Fellowship/Salary:**31,000/- per month + HRA as applicable**

5. Project Detail:

*Interactive Tactile Internet (TI) application distinguishes itself in terms of feedback-centric closed-loop human-in-the-loop human-machine interaction consisting of bidirectional data communication (command and feedback) unlike the machine-to-machine communications in the existing communication network. However, haptic applications require stringent requirements in terms of latency (up to 1ms) and reliability (up to five nines). However, the existing literature has overlooked many aspects of TI system, such as latency analysis in statistical sense, inclusion of latency incurred in computation, generalized computationally-efficient Machine Learning (ML) algorithm to cover a wide range of applications, and performance evaluation over realistic wireless network rather than wired one in laboratory. Apart from these, mounting the computation and control on the smart haptic device itself is another important issue of interest to handle the ultra-low latency and high reliability applications. We will work towards these issues and design an intelligent TI system.*

6. Qualifications & Experience:

- a) M.Tech./M.E/M.S. degree in EE/EC/CS/IT/Maths& Comp) or equivalent, with a minimum CPI of 6.5 or 60% of marks. Relaxations for SC/ST/OBC/women/PD will be given as per the GOI norms.

OR

- b) BE/BTech/MCA/MSc in CS/IT/Maths& Comp/ECE/ EE/ or equivalent with CPI of 7.5 or 70%. Candidate should have GATE qualification / NET qualification. Relaxations for SC/ST/OBC/women/PD will be given as per the GOI norms.

7. Application Process

- a) Candidates interested in this position and satisfying the qualification criteria should write an email ([ssu@iitp.ac.in](mailto:ssu@iitp.ac.in)) to the Project Investigator **Dr. Suraj Suman, Assistant Professor, EE, IIT Patna.**



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- b) The subject of the email should read as “**JRF Position**”. The last date for receiving this email is 28<sup>th</sup> April 2024.
- c) The email **MUST** include the scanned/pdf copy of duly filled application form (see below) with applicant’s signature. There is no application fee and no need to send the hard copy of the application.
- d) The email **MUST** include copy of all supporting documents (degree certificates, marksheets, GATE/NET scorecard, and category certificate, if applicable).
- e) The application should also include a brief Academic CV not exceeding two pages.
- f) IIT Patna reserves the right to not shortlist any candidate in case the application email does not contain complete information backed up by supporting documents as listed above.
- g) All candidates who apply via email by 28<sup>th</sup> April 2024 (deadline) and are shortlisted will be informed regarding the further details by 30<sup>th</sup> April 2024 (tentatively). Date of ONLINE Interview: 3<sup>rd</sup> May 2024 (tentatively). It is the responsibility of the applicant to ensure that they have reliable internet connectivity on the date of online interview.

**Important Dates:**

1. Last date of receiving applications by Email: 28<sup>th</sup> April 2024 (tentatively)
2. Shortlisted candidates will be informed by Email: 30<sup>th</sup> April 2024 (tentatively)
3. Exact date of online interview in meet: 3<sup>rd</sup> May 2024 (tentatively)

For any query contact Investigator(s): **Dr. Suraj Suman, Dept. of Electrical Engineering, IIT Patna, Emails: [ssu@iitp.ac.in](mailto:ssu@iitp.ac.in) Tel.: 06115-233-970.**

**Deputy Registrar**

Copy to:

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



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**FORMAT OF APPLICATION FOR JRF**

<b>Name &amp; Address</b> <b>Including email id and Phone no.</b> <b>(for Correspondence)</b>	<b>Category</b> (GEN/OBC/SC/S T/PD)	<b>DOB</b> dd/ mm/yy	<b>Professional Exam.</b> <b>(GATE/CSIR-NET, etc) &amp;</b> <b>Validity</b>
<b>NAME IN CAPITAL</b> Address:    Phone: Email:			
<b>Educational Qualification</b>			
Institute/ Board	Exam Passed	Year of Passing	% of Marks/CPI
	10 <sup>th</sup> Class		
	12 <sup>th</sup> Class		
	Bachelors (B.Sc/B.Tech/B.E./BCA) or equivalent		
	Masters (M.Sc/M.Tech/M.E/MCA/ MA) or equivalent		
Qualifying degree	Degree/ major/Specialization		
(B.Sc/B.Tech/B.E./BCA)			
(M.Sc/M.Tech/M.E/MA/MCA)			
Others			

Signature of applicant

Date:

Place: