

# **Department Of Electronics & Communication Engineering**

# MOTILAL NEHRU NATIONAL INSTITUTE OF TECHNOLOGY ALLAHABAD PRAYAGRAJ-211004

# Advertisement No.- 684/2024/Project Staff/ECED

Dated-04/10/2024

# Advertisement for the Post of Junior Research Fellow (On Contract)

Applications are invited from Indian nationals for the post of **Junior Research Fellow (on contract)** in research project entitled "Design and development of ML based adaptive optimal control algorithms for efficient regulation of the Wheeled Robots for Disaster Response" sanction letter no. **CRG/2023/004912** dated 18/01/2024 sponsored by SERB, GOI, New Delhi.

The duly completed application on prescribed format along with copies of supporting documents must reach to: Office of the Dean (Research & Consultancy), Motilal Nehru National Institute of Technology Allahabad, Prayagraj -211004 on or before 24/10/2024. The envelope should be superscribed as "Application for the post of Junior Research Fellow (JRF) (on contract) in the SERB- CRG research project "Design and development of ML based adaptive optimal control algorithms for efficient regulation of the Wheeled Robots for Disaster Response". A soft copy of the application should also be sent to sumit-k@mnnit.ac.in (email address of Dr. Sumit Kumar Jha, Assistant Professor, Department of Electronics and Communication Engineering & Principal Investigator) with the subject of the email as "Application for JRF (on contract) in SERB-CRG Project" on or before 24/10/2024, 5.00 PM (IST). The positon is purely temporary and will be governed by the funding agency rules and service conditions of Office of the Dean (Research & Consultancy), MNNIT Allahabad.

**Description and Objectives of the Project:** The aim of this project is to develop machine learning/RL based AOC algorithms for wheeled robot motion control which will achieve faster convergence, improved stability criteria, low energy consumption, and lower memory requirement. Further, these new algorithms would be subsequently implemented on the wheeled robots and would be analyzed for a significantly efficient wheeled robotic locomotion in terms of improved performance characteristics while performing disaster response activities.

Number of Position :	1 (One)
<b>Essential Qualifications:</b>	Graduate / Post Graduate Degree in Professional Course (in electronics/electrical and
	other relevant specializations) selected through a process described through any one
	of the following:
	a. Scholars who are selected through National Eligibility Tests - CSIR-UGC NET
	including lectureship (Assistant Professorship) and GATE.
	b. The selection process through National level examinations conducted by Central
	Government Departments and their Agencies and Institutions such as DST, DBT,
	DAE, DOS, DRDO, MoE, ICAR, ICMR, IIT, IISc, IISER, NISER etc.
Fellowship :	Rs 31,000 per month (Consolidated) + 16% HRA (as per the Institute norms).
Desirable Experience :	Research experience in the area of machine learning/robotics/system analysis/signal
	processing etc.
Other Benefits :	Accommodation may be available as per the availability and the Institute norms.
	Candidate selected for the JRF may register for Ph.D. if eligibility conditions, as set
	by institute, is met by him/her. Facility of yearly leave, carryover leave, medical
	benefits etc. may be available as per applicable rules of the project staff.
Age Limit :	As per the DST-SERB guidelines.
Tenure of Appointment:	Appointment will be made on contract basis for a period of one year initially, which
	may be extended depending on the performance evaluation on yearly basis till the end of project. Project will end in January 2027.



# **Department Of Electronics & Communication Engineering**

# MOTILAL NEHRU NATIONAL INSTITUTE OF TECHNOLOGY ALLAHABAD PRAYAGRAJ-211004

### Note:

- 1. The applicant will be responsible for the authenticity of information, other documents and photographs submitted.
- 2. The Institute reserves the right to accept application at any time, and consider candidates of exceptional credentials without applications.
- 3. Qualification and experience may be relaxed by the Institute at any point of time for otherwise exceptional candidates. Mere, possessing the prescribed qualification does not ensure that the candidate would be called for Interview. The Candidates will be shortlisted on the basis of merit and need of the project.
- 4. Shortlisted Candidates will be informed by e-mail about the interview date. So, the candidate must provide valid E -mail IDs in their applications.
- 5. Shortlisted candidates have to present themselves for the interview on the interview date with updated CV, publications if any, and original and attested photocopies of mark sheets/ certificates in support of their academic qualifications.
- 6. Applicants in employment (private, government or any other organization) are required to submit a "No Objection Certificate" from the employer at the time of interview.
- 7. No TA/DA will be paid for appearing in the interview.

Name of Principal Investigator : Dr. Sumit Kumar Jha
Designation : Assistant Professor

Department : Electronics and Communication Engineering



# **Department Of Electronics & Communication Engineering**MOTILAL NEHRU NATIONAL INSTITUTE OF TECHNOLOGY ALLAHABAD PRAYAGRAJ-211004

						For office ι	ise only		
			A DDL IO A TION	FORM	Applica	ation No			
Advt.No 684/2024/Project Staff			APPLICATION FORM Aff/ECED			Dated			
Research Project Entitled a		De alg	sign and development of ML b orithms for efficient regulation saster Response						
			ntion order no.: CRG/2023/004912	Paste Self	Attacted				
Funding Agency		Sci	ence and Engineering Research B	recent passport					
		Dr.	Dr. Sumit Kumar Jha				size Photograph		
Name of Position		Jun	nior Research Fellow (on contract)						
Department/Section			ctronics & Communication Engineer	1					
1.	(in Capital letter)					1			
2.	Sex (Male/Female) Marital Status								
3.	(Married/Unmarried)								
4.	Date of Birth								
5.	Age as on last date of application		YearsMonthsDays						
6.	Father's/Husband's Name								
7.	Present/Contact Address								
8.	Permanent Address								
9.									
10. 11.									
12.	Nationality  Category		Gen/SC/ST/OBC/PH(enclosed attested copy of certificate) and women			1			
			A. GATE: Yes/No; Year:Roll NoScore/RankValid upto						
13.	NET/GATE		B. NET : Yes/No; Year:Roll NoScore/RankValid upto						
14.	Educational Qualification								
	Qualification		Subject/Discipline	Board/Institute/Univ.	Year	% of marks	Division		
10 <sup>th</sup> or equivalent									
	12 <sup>th</sup> or equivalent						1		
<u> </u>	Diploma, if any						-		
	.Sc./B.E./B.Tech.						1		
	M.Sc.						1		
M.Phil./M.E./M.Tech.*							1		



# **Department Of Electronics & Communication Engineering**

# MOTILAL NEHRU NATIONAL INSTITUTE OF TECHNOLOGY ALLAHABAD PRAYAGRAJ-211004

Title of M.E./M.Tech. Thesis:								
15.	Details of Experience in	n chronological	order. Enclose a sepa	arate sheet duly	authenticated unde	er your sign	ature if nece	essary
	Organization	Position	Salary/ Emoluments	Nature of Duties	Nature of appointment	Period Year	d of Experie Month	ence Days
16.	Research Publications	(Attach list):-			Numbers :			
SCI Jo	ournals :						•	
Non S	CI Journals :							
Interna	ational Conference/Semir	nar ./ Symposiu	m Proceeding :					
Nation	al Conference/Seminar	/Symposium Pr	oceeding:					
17.	Any other information							
18.	Indicated whether you propose to register for higher degree* at MNNIT, Allahabad. Yes/No (Name of degree is Ph.D.)							

**Note:-** \*Those candidates who wish to be admitted as student for higher degree (Ph.D.) must fulfill at least the minimum eligibility for the respective admission as available on the Institute website.

# **DECLARATION**

I hereby declare that all the statements made in this application are true and complete and nothing has been concealed/distorted. I am aware that, if at any time I am found to have concealed/distorted any material information, my engagement is liable to be summarily terminated without notice.

Place:	(Signature of the Applicant)
Date:	

**Enclosure-** Self attested copy of following documents:

- 1. Proof of Date of Birth.
- 2. Mark sheets & certificates of all the examination passed.
- 3. Category Certificate, if applicable.
- 4. GATE/NET score card, if applicable.
- 5. Experience certificate, if any.