



राष्ट्रीय प्रौद्योगिकी संस्थान दुर्गापुर

National Institute of Technology Durgapur

*An Institute of National Importance under the "Ministry of Education", Government of India
Mahatma Gandhi Avenue, Durgapur – 713209, West Bengal, India*

ADVERTISEMENT FOR THE POST OF JUNIOR RESEARCH FELLOW (JRF)

Applications are invited from Indian citizens for the following post to work in a project funded by Anusandhan National Research Foundation (ANRF), Government of India.

Project Title:

Design, Development and Field Deployment of a Digital Twin of Indian Power Grid at State Level (Gujarat) for advanced Grid Stability, Security and Resilience of Renewable Energy Integrated Power System.

Sponsoring Agency: Anusandhan National Research Foundation (ANRF)

Project Registration Number: NITD/SRCC/SP/EE/2026-27/10

Project Duration: 3 years

Investigator:

Co-PI (PI from NIT Durgapur) - Dr. Santanu Paul, Assistant Professor, Department of Electrical Engineering, NIT Durgapur

About the Project:

This is a collaborative research project between NIT Durgapur, IIT Bombay, and Gujarat State Utilities (GETCO/SLDC/DISCOMs). The project aims to design, develop, and field-deploy a Digital Twin of the Gujarat power grid to address challenges arising from high renewable energy penetration (solar/wind), grid stability, and resilience against extreme events. The research involves close collaboration with Gujarat's power sector stakeholders and access to real-time grid data from Gujarat's SCADA, PMU, and AMI infrastructure.

Position: JRF

Number: One

Fellowship:

- ✓ 1st & 2nd Year: Rs. 37,000 + HRA (as per Institute Norms) per month
- ✓ 3rd Year: Rs. 42,000 + HRA (as per Institute Norms) per month (Subject to upgradation to SRF based on performance)

Accommodation: Accommodation inside NIT Durgapur campus is subject to availability. If availed, HRA will not be given.

Tenure: The post is purely temporary, initially for a period of one year, extendable up to 3 years based on performance.

Educational Qualification:

- ✓ M.E./M.Tech/M.S or equivalent degree in Electrical Engineering / Power Systems / Renewable Energy / Control Systems / Energy Systems with a minimum of 65% marks or 6.5 CGPA from any recognized Institute/University.
- ✓ B.E./B.Tech in Electrical/ Energy Systems Engineering with a minimum of 65% marks or 6.5 CGPA from any recognized Institute/University (with valid GATE).

- ✓ GATE/NET qualified (desirable).

Desirable Experience/Skills:

- ✓ Experience in power system modelling and simulation
- ✓ Basic knowledge of digital twin concepts, AI/ML algorithms, and data analytics is highly desirable.
- ✓ Familiarity with SCADA, PMU data, and smart grid technologies.
- ✓ Good programming skills in Python, C++, or similar languages.
- ✓ Selected candidates may be encouraged for a PhD program under this project.

How to Apply:

Eligible and interested candidates should send their complete application in the prescribed format (available below) along with self-attested scanned copies of all mark sheets, certificates, and a detailed CV to Dr. Santanu Paul via email: spaul.ee@nitdgp.ac.in. The subject line of the email must be: "Application for JRF - Digital Twin Gujarat Grid - [Your Name]".

Last Date of Application: 2nd August, 2026

Mode of Selection:

All applications will be screened, and shortlisted candidates will be called for an interview (to be notified on the Institute website). Date of interview to the shortlisted candidates will be notified via email. Shortlisted candidates must bring original documents for physical verification on the date of the interview.

Terms and Conditions:

- The position is purely temporary and contractual. It does not confer any right for permanent employment at NIT Durgapur.
- The selected candidate is expected to join immediately.
- Canvassing in any form will disqualify the candidature.
- No TA/DA will be paid for attending the interview.

Dr. Santanu Paul

Co-Principal Investigator

Assistant Professor, Department of Electrical Engineering

National Institute of Technology Durgapur

Email: spaul.ee@nitdgp.ac.in



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FORMAT FOR APPLICATION

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here

1. Project Title: .
2. Project Registration Number:
3. Post Applied For:
4. Personal Information:

Name (in Capital letters):

Date of Birth:

Gender:

Nationality:

Category (SC/ST/OBC/EWS/General):

Contact Address (with PIN Code):

Permanent Address:

Email Address:

Mobile/Phone Number:

5. Educational Qualifications:

(Starting from Class 10 onwards)

Examination	Discipline	Board/University	Percentage (%)	Year
M. Tech/M. E				
B. Tech				
Class XII				
Class X				

6. Details of GATE/NET Examination:

Examination Name:

Score/Percentile:

Year of Passing:

Validity:

7. Research Experience / Work Experience (if any):

Name of Organization:

Designation:

Period (From - To):

Nature of Work:

SP

8. Computer & Technical Skills:

Programming Languages (e.g., Python, C++, MATLAB):

Software/Tools (e.g., PSS@E, DIgSILENT, OpenDSS):

Other skills (e.g., AI/ML, Data Science):

9. Any Other Relevant Information:

10. Awards (if any):

11. Any Publications/Patents (if any):

12. Declaration:

I hereby declare that all the information provided in this application is true and correct to the best of my knowledge. I understand that any false information may lead to the cancellation of my candidature.

Full Signature of the Candidate

Checklist for Submission:

1. Filled and signed Application Form.
2. Detailed Curriculum Vitae (CV).
3. Self-attested copies of all mark sheets (10th onwards).
4. Self-attested copies of degree/provisional certificates.
5. Valid GATE/NET scorecard (if applicable).
6. Experience/Publication certificates (if any).
7. Valid ID Proof (Aadhar, Voter ID, etc.).

