SRIC/06

INDIAN INSTITUTE OF TECHNOLOGY, ROORKEE
Department of Civil Engineering

Dated: January 27, 2025

ADVERTISEMENT TO FILL UP PROJECT POSITIONS*

Applications are invited from Indian nationals only for project position(s) as per the details given below for the consultancy/research project(s) under the **Principal Investigator (Name: Prof. Alok Bhardwaj), Co-Principal Investigator (Name: Prof. Siddhartha Khare), Co-Principal Investigator (Name: Prof. M.V. Sunil Krishna),** Department of Civil Engineering, Indian Institute of Technology, Roorkee (Project Number: DIA-2549-CED/24-25). The selected candidates will work under the supervision of **Prof. M.V. Sunil Krishna**, Department of Physics.

1. **Title of project:** Object Detection using Hyperspectral Remote Sensing
2. **Sponsor of the project:** DRDO, New Delhi
3. **Project position(s) and number: One** Junior Research Fellow, **One** Project Fellow
4. **Qualifications for Project Fellow:**

   PhD in Engineering or PhD in Science with 2 years of experience OR Mtech/M.Sc. with 3 years of experience OR Btech/B.Sc. with 6 years of experience.

   Experience of working with Radiative Transfer Modeling, Meteorology, Physics based atmospheric correction model, calibration/validation of Hyperspectral/Multispectral sensors such as HYSIS, AVIRIS-NG, Experience with retrieving surface reflectance and multiple geophysical parameters.

   Qualifications for Junior Research Fellow:

   BSc in Physics and Mathematics with minimum CGPA of 6.5 **and** M.Sc. in Physics/Atmospheric Science/Mathematics/Remote Sensing or M.Tech Physics/Atmospheric Science/Remote Sensing or any closely related area with minimum CGPA of 7.0. WITH GATE QUALIFICATION CERTIFICATE.

   Experience of working with Radiative Transfer Modeling, Meteorology, Physics based atmospheric correction model, calibration/validation of Hyperspectral/Multispectral sensors, Atmospheric Modeling, Experience with retrieving surface reflectance and multiple geophysical parameters, competent in computer programming
5. **Emoluments:**

   Emoluments for Project Fellow: Rs. 40000/- per month + HRA (with 10% increment every year)

   Emoluments for Junior Research Fellow: Rs. 37000/- per month + HRA
6. **Duration:** 3 years
7. **Job description for Project Fellow:**

   Project Fellow will undertake the overall management of the project. The candidate will be responsible for Radiative Transfer Modeling, Meteorology, Physics based atmospheric correction model, calibration/validation of

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Hyperspectral/Multispectral sensors. The candidate will prepare reports and presentations and strive towards publishing the research in reputed research journals.

Job description for Junior Research Fellow:

The JRF will be involved in the research and development activities of the project including Radiative Transfer Modeling, Meteorology, Physics based atmospheric correction model, calibration/validation of Hyperspectral/Multispectral sensors

8. Candidates before appearing for the interview shall ensure that they are eligible for the position they intend to apply.
9. Application is only acceptable through the following Google form LINK
10. Please note that no TA/DA is admissible for attending the interview.

The last date for application to be submitted to through Google Form is **February 20, 2025, by 5 PM.**

Only the shortlisted candidates will be called for an interview. The interview will be online.

Candidate may be asked to show the original degree(s)/certificate(s), and experience certificate(s) at the time of interview/joining for verification

(Alok Bhardwaj)
Name and Signature of Principal Investigator

*To be uploaded on IIT Roorkee website and copy may be sent to appropriate addresses by PI for wider circulation.

APPROVED

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Dean
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