భారతీయ సాంకేతిక విజ్ఞాన సంస్థ హైదరాబాద్
కంది – ౫౦౨ ౨౮౪, సంగారెడ్డి, తెలంగాణ, భారత దేశం
भारतीय प्रौद्योगिकी संस्थान हैदराबाद
कंदी – ५०२ २८४, संगारेड्डी, तेलंगाना, भारत
Indian Institute of Technology Hyderabad
Kandi – 502 284, Sangareddy, Telangana, INDIA

Advertisement for the Post of JRF

Applications are invited for the Junior Research Fellow (JRF) position in a research project funded by DRDO to be carried out at the Department of Physics, IIT Hyderabad.

1	Name of post	Junior Research Fellow (JRF)
2	Project title	Numerical Simulation of Orbital Propagation and Experimental Validation of the LEO Objects using Optical Tracking Approach
3	Job description	Year 1: Image analysis of Low Earth Orbit (LEO) objects, set up an image analysis algorithm pipeline, and calculate orbital elements from images of a given LEO. Finally automated the procedure for a large number of LEO objects. Year 2: assist in conducting field operations of the facility on a daily basis, which include (1) a list of LEO source selection (2) prepare an observation plan, (3) track and record each pass with multiple short exposures, (4) calculate orbital elements using the algorithm developed in year 1.
4	Funding agency	DRDO, Government of India
5	Duration of the project	2 Years, with a possibility of further extension based on performance, funding availability and an opportunity to work with the DRDO Labs.
6	Number of vacancies	1
7	Monthly compensation	Rs. 37,000 + HRA (as per Govt. norm)
8	Minimum eligibility requirements	1. M.Sc. in Physics/Astrophysics/Space Physics from recognised institutions with a minimum 70% Marks or 7.0 CGPA OR 2. M.Tech/M.E. in /Computer Science/Electronics and Instrumentation/Aerospace/Electrical from a recognised institute (CGPA 7.0 or above) 3. GATE qualification with a valid GATE scorecard
9	Desirable qualifications	Knowledge of orbital dynamics, Astrodynamics, or experience with the operation of a telescope, intermediate/advanced Python programming skills, knowledge of AI/ML techniques and applications (intermediate to advanced level)
10	Age limit	29 years as of 1 January 2025

Application procedure

- Prepare a single PDF file containing the following documents/information:
  - A Curriculum Vitae detailing your education and experience
  - Master's degree mark sheets/transcripts
  - A cover letter (maximum two pages) describing your background relevant to the project and how you can contribute to the project.
  - Contact details of two references
  - GATE/NET scorecard
- Email the application file to Dr. Mayukh Pahari at mayukh@phy.iith.ac.in . Please mention “Application for JRF, PHYSICS <applicant’s name>” in the subject line.
- This is a rolling advertisement; applications will be reviewed and shortlisted by the PI every 15 days until a suitable candidate is found.

- **Selection process:**
- Candidates will be shortlisted based on merit and project requirements.
- Shortlisted candidates will be called for an interview and informed via email about interview details. Online Interviews will be held within a few days of the close of applications. The candidate who will qualify for the interview will be informed by email.
- The shortlisted candidate is required to join immediately.

Dr. Mayukh Pahari
(Principal Investigator)