

Job Description: Developer (JRF / Project Associate-I)

Project Area: Astrodynamics and Space Situational Awareness (SSA) Software Development

Principal Investigator: Dr. Sanat K Biswas, IIIT Delhi Space Technology Centre

Duration: 12 months

Overview

We are seeking highly motivated Developers (JRF / Project Associate) to join our team at the IIIT Delhi Space Technology Centre. The successful candidates will be responsible for the core algorithm design and implementation for a sophisticated astrodynamics and Space Situational Awareness software system.

Key Responsibilities

- Implement core algorithms for space object trajectory simulation and tracking data analysis.
- Implement advanced models for parameter estimation, trajectory propagation, and maneuver detection.
- Develop and integrate various software modules
- Participate in software testing, debugging, and continuous integration of the simulation engine.

Qualifications & Skills

- **Minimum Educational Qualification (as per DST guidelines):**
 - **For JRF:** M.Tech degree in Computer Science and Engineering/ Electronics and Communication Engineering or in allied areas 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.
 - **For Project Associate-I:** M.Tech Computer Science and Engineering/ Electronics and Communication Engineering or in allied areas or bachelor's degree in Computer Science and Engineering/ Electronics and Communication Engineering or in allied areas from a recognized University or equivalent.

- Strong programming skills, ideally with proficiency in Python, C++, or similar languages for scientific computing.
- Solid understanding of numerical methods, specifically numerical integrators for physics-based simulations.
- Familiarity with machine learning and AI techniques, particularly their application to data-driven modeling and estimation.
- Excellent problem-solving abilities and a strong mathematical background.

Compensation

- **Junior Research Fellow (JRF):** ₹37,000 per month + HRA
- **Project Associate-I:** ₹30,000 per month + HRA

Application Process

To apply, fill the form here: <https://forms.gle/1tSFQ35sW6QPRXZV6>

Deadline: 31st May, 2026

About IIIT Delhi: IIIT-Delhi is accelerating on the path of becoming one of the leading comprehensive research-led teaching institutes in India and has proven to be consistently responsive towards the evolving needs of society. The faculty members at IIIT-Delhi are among the finest in the country and are internationally recognized. Carrying out cutting-edge research is in the institutional DNA of IIIT-Delhi.