

# DEPARTMENT OF TRAINING AND PLACEMENT DELHI TECHNOLOGICAL UNIVERSITY

(Formerly Delhi College of Engineering)

#### Govt. of NCT of Delhi

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F.No. DTU/T&P/505(Vol-II)/2025-26//227

Dated :-/6/04/2025

## **NOTICE**

Applications are invited from motivated and eligible students for a research internship under an DTU x ISRO project titled:

"Vision Based Pose Estimation for Non-Cooperative Docking/Inspection Satellite using Deep Learning AI Algorithms"

#### **Project Overview:**

This project aims to develop a deep learning-based solution for vision-based pose estimation of satellites, particularly in non-cooperative scenarios. The research involves:

- Designing and training deep learning models for satellite pose estimation
- Applying knowledge distillation techniques to compress the model
- Deploying the lightweight model on NVIDIA Jetson edge AI devices

### **Eligibility:**

- Open to undergraduate (3rd/4th year B.Tech).
- Strong background in Deep Learning and Computer Vision
- Proficiency in Python, and experience with PyTorch or TensorFlow
- Basic Knowledge of Pose estimation or related geometric concepts
- (Preferred) Prior exposure to pose estimation, embedded AI, or Jetson kits

#### Benefits:

- Internship Certificate (from DTU x ISRO collaborative project)
- Research mentorship and guidance
- Potential opportunity for research publication, patent or project extension

Interested candidates must fill out the registration form at the following link: https://forms.gle/ac9cRWBDbAP6DzGb6

Application Deadline: 25th April 2025

Shortlisted candidates will be contacted via email for a brief technical discussion.

For queries, contact: anil@dtu.ac.in, kavinder@dtu.ac.in

Prof. Anil Singh Parihar Head (Training & Placement)

#### Copy to :-

- 1. All Deans / HoDs with request to inform all students.
- 2. Head CC with request to put the notice on DTU Website
- 3. All Notice Board
- 4. Guard File.