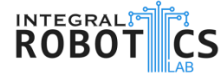




# INTEGRAL ROBOTICS LAB

## INTEGRAL UNIVERSITY LUCKNOW



### BACHELOR'S THESIS

## Arduino Based Star and Planet Tracker

### Project Description:

The "Affordable Arduino-Based Star Tracker" is an affordable and user-friendly educational tool designed to inspire students and astronomy enthusiasts. Using laser light technology and Arduino microcontrollers, this project enables precise tracking and identification of stars in the night sky. It serves as an engaging educational instrument, fostering a deeper understanding and appreciation of astronomy.

### Tasks Involved:

1. User-Friendly Interface: Develop an intuitive interface for users to control and view tracked celestial objects.
2. Celestial Object Database: Create a database with object data (stars and planets).
3. Coordinate System: Implement an accurate coordinate system for object positioning.
4. Tracking Mechanism: Build a precise mechanism to adjust the laser's position based on coordinates.
5. Laser Technology: Integrate a laser module for object pointing.
6. Arduino Control: Program the Arduino for interface and control.
7. Tracking Software: Develop real-time object tracking software.

### Supervisor:

Mr.Faiyaz Sir

Start Date: 10/Sept/2023.

End Date: 10/Dec/2023