

Title of the Project	Boost.Astronomy
Commencement Date	Mar 2020
Completion Date	ongoing
Project Supervisor	Pranam Lashkari
Organization/Institution where the Project was accomplished	Online mode on github
Project Description (You can use extra A4 sheets in case you run out of space however the extra sheets should also have the seal & signature of the Project Supervisor or the relevant authority)	
<p>Implemented Various Arithmetic Operations (e.g. Cross Product, Dot Product, Inter-transformations) for the existing Astronomical Coordinate system using Boost::Geometry and Boost::Units library.</p> <p>Restructured Base class of the existing Coordinate System to support Inter-Comparisons and added tests for differential coordinates to provide a robust astronomical coordinate system.</p> <p>Used Template Meta Programming in C++ to provide almost no run-time overhead and allow users to write scientifically infallible code by detecting most of the errors at the compile time.</p>	

Project Verification Form

By appending your signatures to this form you acknowledge and agree that:

- This form along with the certificate would serve as the official document between the project supervisor and Students Placement Office, IIT Kanpur regarding verification of the student's project work
- The student will provide additional information and documentation relevant to his/her project upon request by the Students' Placement Office
- The student has clearly defined his/her individual role in projects done in cooperation with other students, faculty, groups or company personnel.
- Incorrectly over-stating the reach, impact and/or quantitative/qualitative results of a project is unethical.
- In case of violation of any of the above rules, Students' Placement Office, IIT Kanpur reserves the right to take necessary action including de-registering the student from the placement season and reporting the misconduct to the Institute Authorities.

Submitted by:-	Project Supervisor Details:-
Name :Rohit Ranjan	Name: Pranam lashkari
Roll No:180629	Designation: Author and Project Maintainer
Signature:	Signature: 