**CMRIT-BLR**

**First Year Internship Project-Synopsis**

**CoE-IHCI**

**Team Number: 18**

**Team Member USN and Name:**

**1.** TEJAS K (1CR21AI057)

**2.** PRAVEEN KUMAR S (1CR21AD044)

**3.** NARENDRAN AJ (1CR21EE054)

**Team Leader name:** TEJAS K (1CR21AI057)

**Domain:** Artificial intelligence and machine learning

**Project Title:**

Ai to recognize star constellation with UI and UX interface

**Introduction:**

Artificial intelligence and machine learning have become a vital part in research studies in this age. OpenCV is a library of programming functions mainly aimed at real-time computer vision. We are planning to use this computer vision technology to develop an AI that uses images to recognize the stars and star constellation. A data-set is created using existing images of star and star constellation and trained the machine learning model using this data -set.

**Problem Statement**:

We are aiming to develop an AI with UI and UX that recognizes stars and star constellation using OpenCV for real-time computer vision technology.

**Objectives:**

Our main objective is the development of an AI program for the mass and the enthusiastic to recognize stars and star constellation. To design and test a computer vision system for orientation sensing employing neural network techniques to perform a star identification process.

**Methodology:**

We used existing stars telemetry data captured by satellites as data-set to train the machine learning model. An experimental program guided the creation of the program and methods needed to create a functioning system, which were further tested to thoroughly analyses system performance.

**Beneficiary:**

The main beneficiary from this project would be astro research centers.

**Expected Outcomes:**

The main objective for this project is to develop and AI based program that helps in stars and star constellation recognition.

**Duration:**

Start Date:11-10-2022

End Date: 30-10-2022