(B)
Prototype Controller Interface Development for Omnidirectional Robot
Abstract

Objective

The objective of the project is to develop a prototype Graphical User Interface (GUI) to wirelessly control an omnidirectional robot. The project aims at developing a wireless controller using joystick control for the omnidirectional robot. The system will be controller using an operator GUI which will be used for monitoring the robot path, camera feedback and robot sensor parameters.

Scope of Work

The scope includes developing a GUI on a suitable platform using C++/Python. The GUI will display parameters from onboard sensors on the like IMU, gyroscope etc. The GUI will also provide a camera viewing interface for the wireless camera mounted on robot. The robot movement will be controlled using a joystick. Suitable control algorithm will be integrated for the movement of the robot. The developed system will be tested in lab for ease of use and stability.

Project Duration:
4 months

No. of Students: 02 (Max.)

Eligibility: Only students of B.E./ B.Tech in Electronics/ Electrical/ Computer Science/ EC/ Instrumentation branches can submit their application at following email addresses

pramit@ipr.res.in **[Guide e-mail address] and**

project_ee@ipr.res.in **[Project coordinator's e-mail address]**

Phone Number: 079-23281022 , 8154085372   [Guide phone number]