

Abstract

In today's world there is an increasing need to create artificial arms for different inhuman situations where human interaction is difficult or impossible. Robot arm is design to do work such as lifting object and carrying object it can bring object or deliver object .Basically the arm is mounted on mobile robot that is controlled by a micro controller. The arm tip is designed such it can catch 10cm maximum size object and minimum size is zero. Arduino uno is used to control the mobile robot and Atmega32 is used to control arm. This project helps two heterogeneous robots to find each other and position themselves at a given point with out using satellite or any other global positioning systems. One mobile robot is equipped with the robot arm to pick object and other is without arm .The robots are brought together by using simplest possible sensor. The sensors used in this project are rigorously tested in order to understand the behaviour of the sensor in different conditions and environment. The proposed algorithm has been carefully designed in order to utilize the on board sensors and bluetooth module to the best extent and is tested on two robots attempting to achieve rendezvous. The algorithm has been successfully implemented on both mobile robots.