

CHAPTER SIX

CONCLUSION and RECOMMENDATION

Overview

In this chapter, conclusion of this project will be drawn. The recommendation of improving the functions of the robot will also be presented so that a new implementation will be adding on to the robot.

6.1 Conclusion:

This project was developed an autonomous robot with RFID application. The final version of the product is a prototype of RFID robot. The design of the robot is similar to forklift. We achieve this using as a Arduino as control unit, DC motor to navigate the robot, RFID reader to read the tag on item, Infrared sensor to identify the shelf of the item and RFID robot is able lift up the item at certain height by generating PWM signal to servo motor. RFID robot uses the maps for navigation and locomotion. Half duplex serial communication is done between Arduino and RFID reader. Arduino retrieves data from RFID reader and displays it at LCD. This system is helpful in factories. Promising result was obtained and several cases were noted and simulated.

6.2 Future Recommendation:

In order to apply RFID robot in real live application, it should be upgraded. Some of the appropriate suggestions are listed below. These suggestions can be continued in future research to build a better design.

1. Implement RFID robot with wireless communication to the host computer.
2. Add a database in the host computer.
3. Develop a graphical user interface for controlling the robot.