COMP 470 Mobile Robotics

Assignment 2 A Wheeled Mobile Robot

Write a lab report of about 3 pages to summarize your understanding of the wheeled robot that we are using in the lab. Submit a paper copy of the report on Thursday, March 17.

Prepare the report using a word processor and include the following sections:

Title
Name

1. Introduction

   - brief paragraph about the purpose of the lab (“to explore some simple behaviors in a wheeled mobile robot” etc.)

2. General Description of the Robot

   - picture and diagram of the robot, its body, placement of motors

3. Description of the Microcontroller

   - include a picture showing components
   - show/describe how motors are interfaced to the controller
   - show/describe H-bridge

   - show/describe interfacing of ultrasonic range sensor

4. Description of How the Controller is Programmed

   - brief description of SW env (Arduino IDE) and libraries
   - pseudocode for algorithms used in the lab

5. Discussion of Performance

   - describe how well the robot performed in the lab and any problems encountered