

COSC 480 – Robotics

Project 4

Purpose: Use what you've learned to create a competition-level robot.

Task: Start your final build.

Create a robot that will seek out and trap a “soccer” ball. This represents milestone 1 in your final robot build. Using the new sensors added to your kit:

- * Locate the IR electronic “soccer” ball
- * Maneuver your robot to trap and control the ball
- * Demonstrate moving with the ball, making forward motions as well as turns.

There are no competition pieces to this milestone, you simply must demonstrate the above functionality. Note that this is part 1 of your final build. The final build will require you to locate a goal and shoot the ball toward the goal (basically, your robot will be playing soccer).

Note: we will follow the approved RoboCup Jr. specifications for robotic soccer closely, but not exactly. For this milestone, we will use an approved RCJ-05 soccer ball in RCJ-Pulse mode.

You may use any of the sensors and LEGOs in the kit as well as any extra LEGOs you may need. If you need extra LEGOs, you should request them from Alan.

DUE: April 12th, to be demonstrated in class.