

Week 10 Team Status

- What are the most significant risks that could jeopardize the success of the project? How are these risks being managed? What contingency plans are ready?

The most significant risk right now is reliable communication between the Raspberry Pi and the Arduino. We are facing buffering issues. We are managing the risks by proactively testing various different solution strategies.

- Were any changes made to the existing design of the system (requirements, block diagram, system spec, etc)? Why was this change necessary, what costs does the change incur, and how will these costs be mitigated going forward?

Originally we had planned for the robot to keep spinning slowly until it sees a group of one or more people. However, given the speed of processing different sensor data, and delay in communication between the raspberry pi and the arduino, we changed our turning mechanism, so that the robot only turn for a fixed amount every time the raspberry pi sends it a turn signal. This means that the robot may not reach right in front of the person/group, but it would still be right by the side of the person, so this change should not impact the overall aim of our project.

- Provide an updated schedule if changes have occurred.

No big changes to the schedule - we are still debugging and testing as mentioned above.