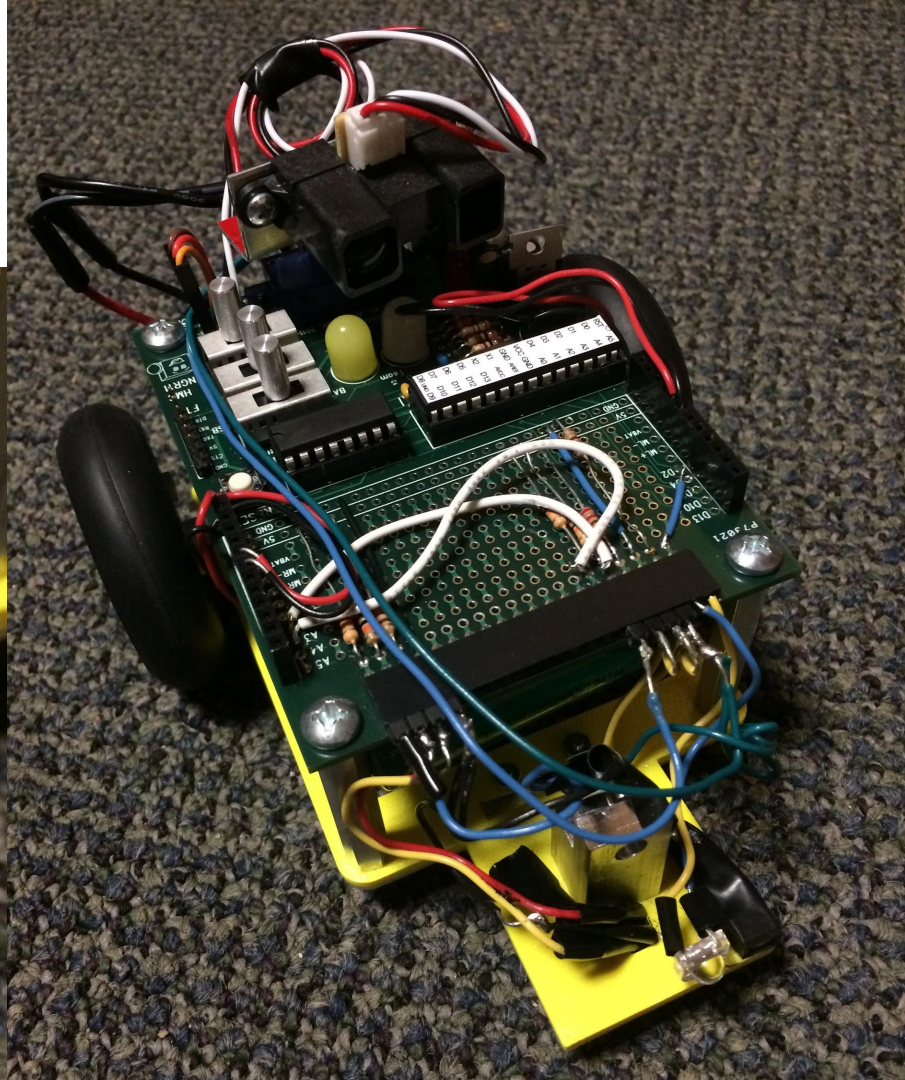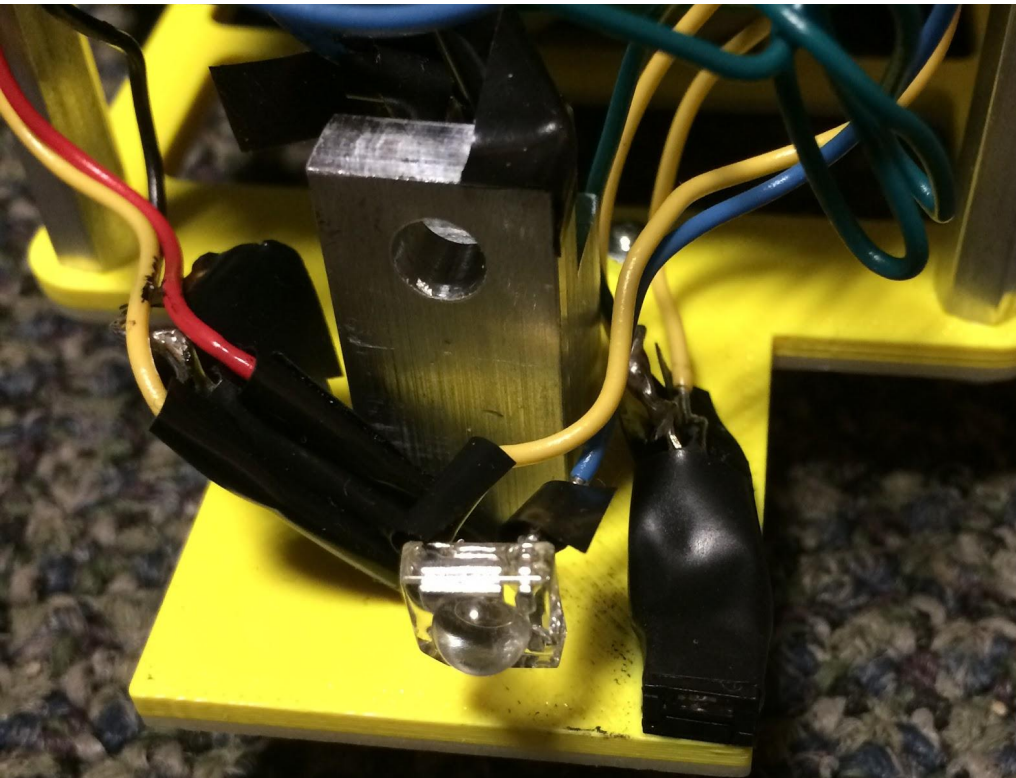# Team WIBSTR
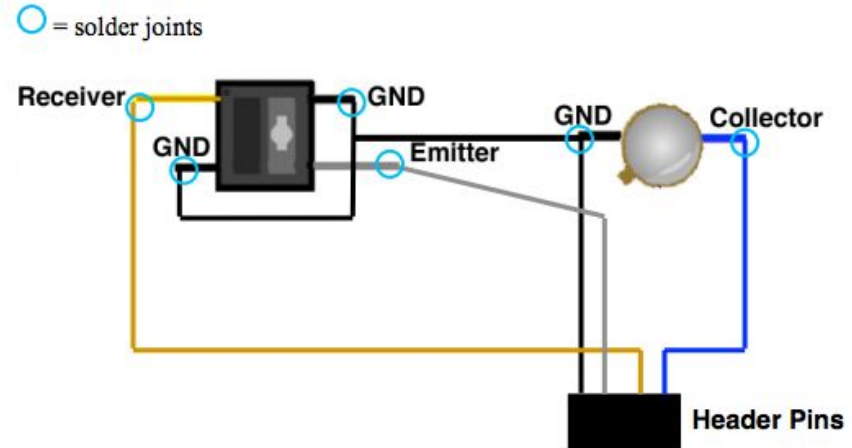
Elizabeth Poss and Evan Amason

Hardware Modifications
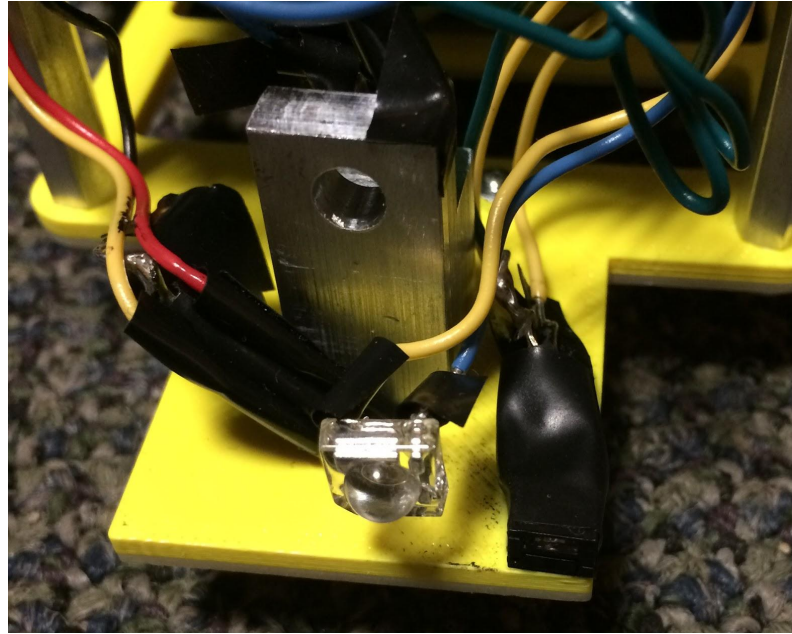
1. Second Reflectance Sensor

- wallCheck() fuction

- second photosensor

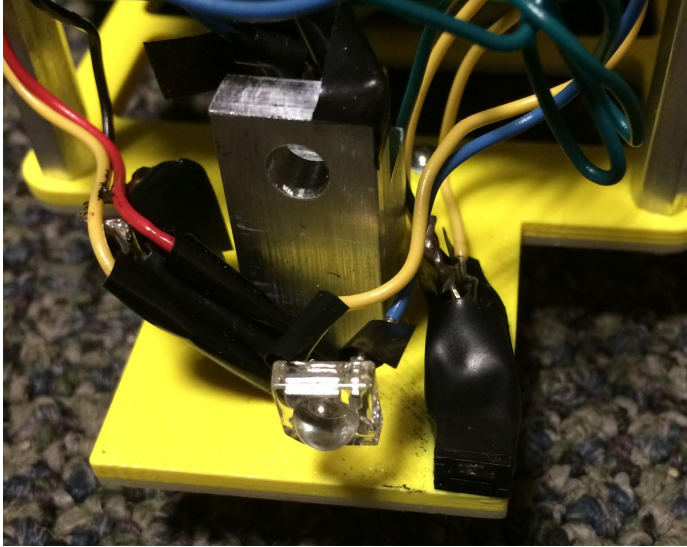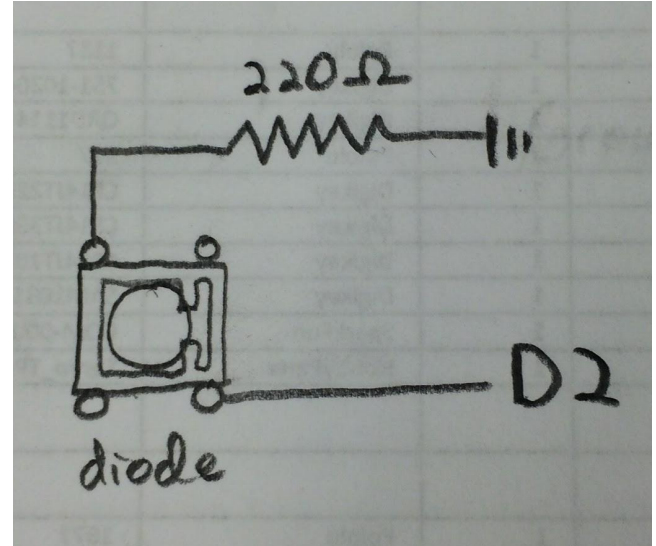# 2. Accidental Chassis Modification

3. Diode for Gold Codes

- adaptive diode placement
- specific gold codes instead of a "shotgun" approach

Algorithm Design

- Our algorithm was designed to located the blue lines on the competition board and follow them to the beacons at either end.
- The instructions on how to handle each beacon varied by the beacon's detected number.
- Once both beacons on a line had been handled, the robot would turn right towards the next line and loop its code.

Algorithm Diagram
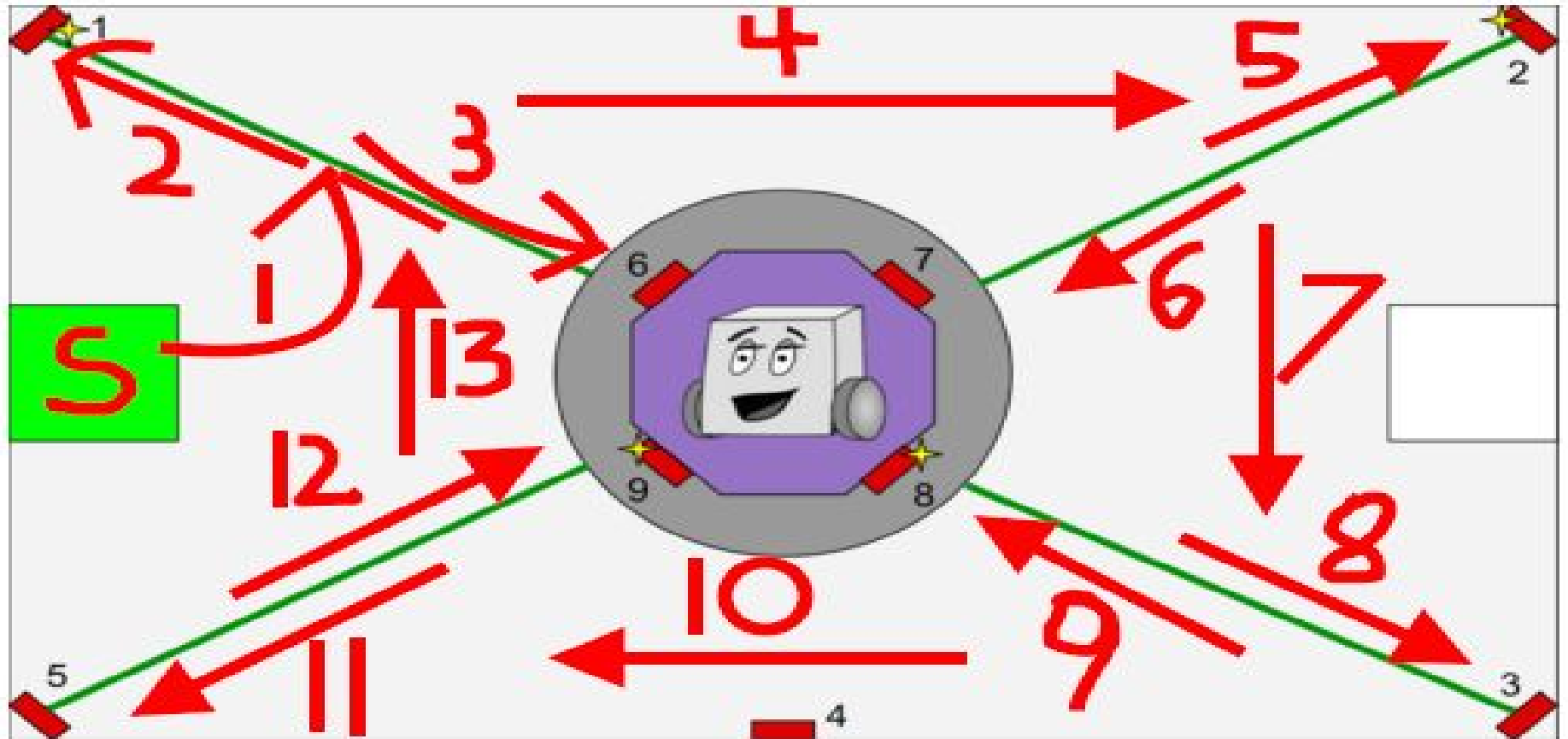
Algorithm Problems

- If the robot failed to detect the gold code on a beacon, it would continue to search endlessly for it.
- If the robot was unable to read that it had successfully changed a gold code, it would continue to act as if it had changed the beacon. This usually resulted in the robot moving forward endlessly into a wall. This is the issue that caused us to get stuck initially in the final competition.