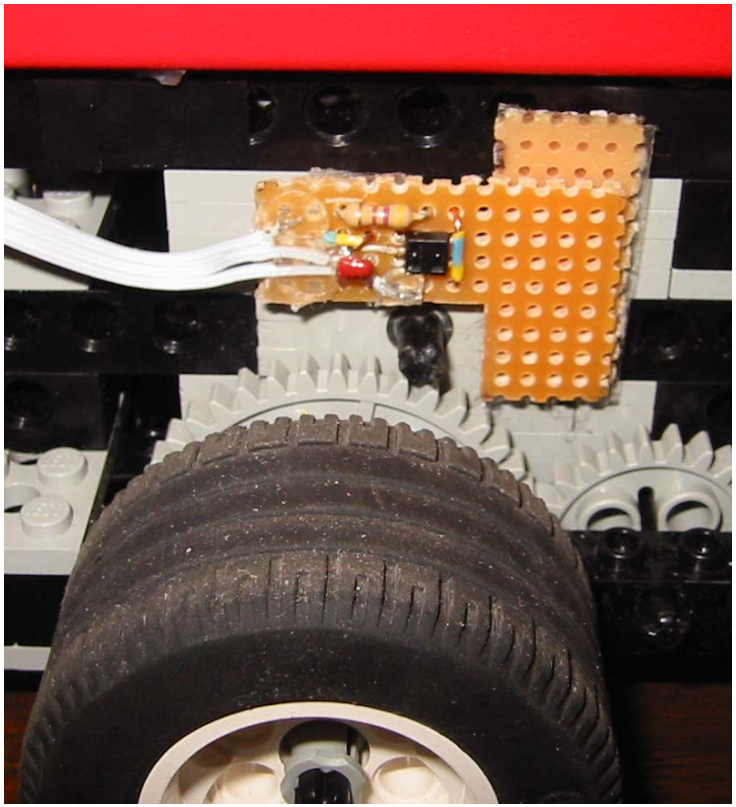
Team 8

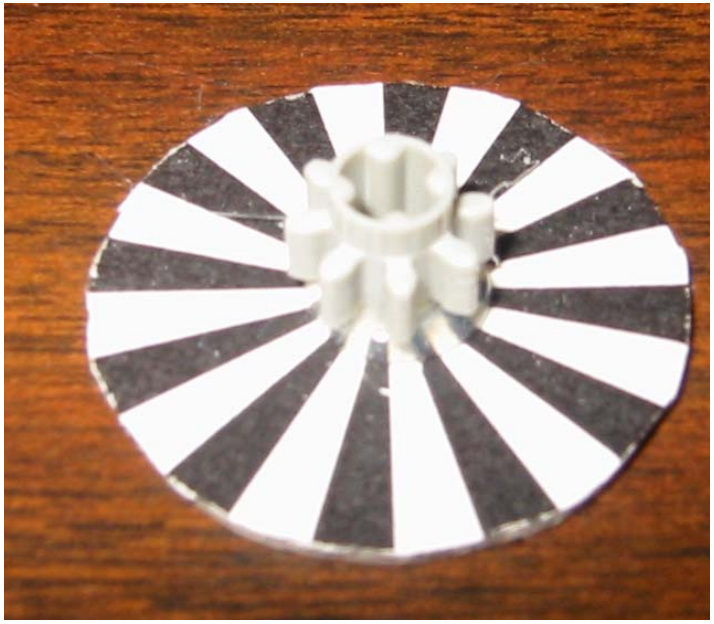
Project 3

Hardware

- Drivetrain was a typical 4WD
- Capture mechanism consisted of a scoop to hold the cube during turns
- Custom encoders built from about 6 dollars of materials had superior resolution to the standard ones

Encoders





Software

- The plan was to have a number of modules with well defined interfaces that abstracted the details away from each other so that each could be designed and tested in parallel
- Time constraints forced us to adopt a less organized approach

Motor drivers were in loco.ic

- Mark did most of the coding and testing of loco
- loco features included motor balance and updating the robot's position in the world model
- It accounted for many details but was well abstracted so other modules only called intuitive drive() and turn() methods

Everything Else was in Behaveway.ic

- Deliberation, path planning, and reactive behaviors were all lumped into this module
- The whole group contributed to this module
- It attempted to account for many details in capturing blocks, recalibrating the world model and avoiding situations that penalize score, but minor logic errors in last minute changes hindered its performance