

Trevor Decker

ILR06

Team B

The Monkey Bots

Thursday March 26,2015

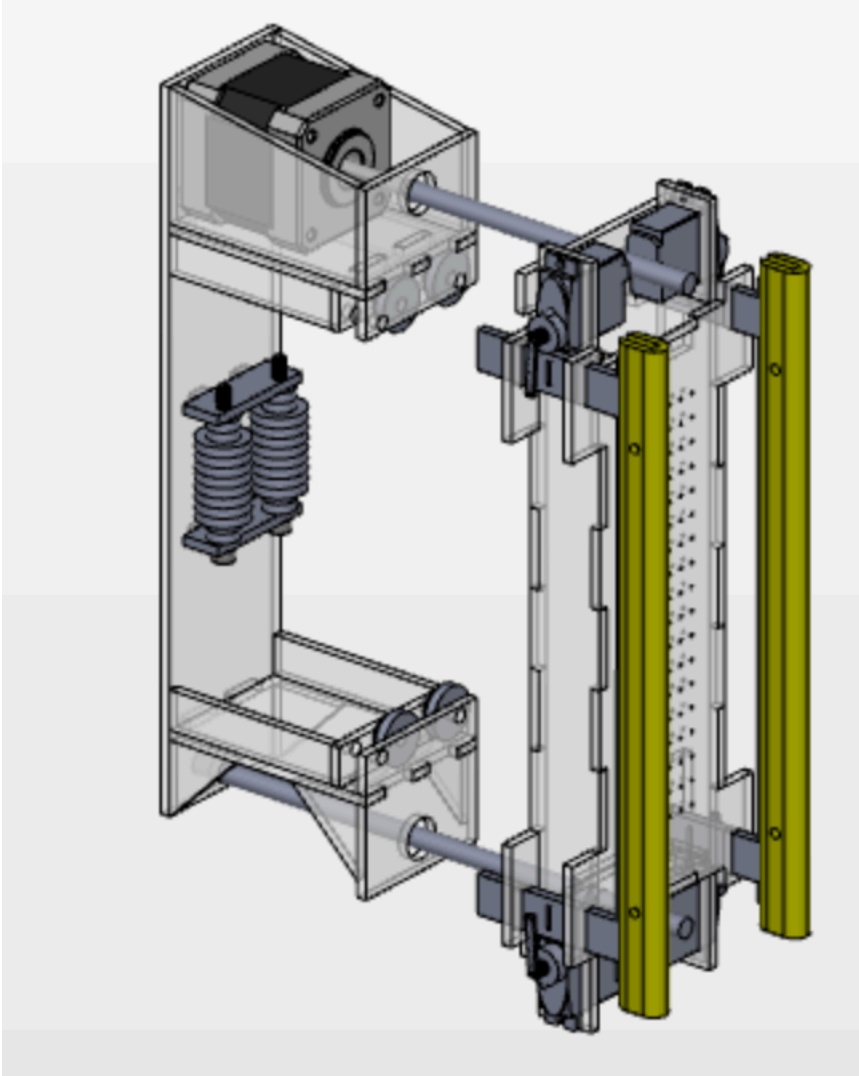
Team Mates Steph Chen

Ian Hartwig

Ian Rosado

### Individual Contribution

This past week I worked on the design of the cleaning unit. By doing iterative design in cad I am saving the team a lot of time and money, since we do not need to waste time putting together designs that will fail. The current design for the cleaning unit can be found in figure 1. The cleaner is mostly made out of Acrylic and Delran. The plan is to attach the controller and battery's to the cleaning unit, however these part has not yet been added to the cad model.



**figure 1:** This shows the current cad for the cleaning unit. It has two parts a water tank with wipers moved by servos and a slider which moves along the extension arm.

### Challenges

We have limited time: the entire project is due on april 22<sup>nd</sup> which is less then a month away.

We still need to acquire some parts for the pivot unit to be put together I plan to go to the hardware store this weekend so we can get all of the parts we need.

The gripper unit can not hold the weight of the robot. To fix this Ian R has been focusing on redesigning it.

We have not done much work on the wiring/controls of the robot since the mechanical system has been so far behind.

### **Team Work**

This week Ian H worked on lasercutting parts for the pivot units. He also assisted me with some ideas about making the cleaning unit stronger and easier to manufacture.

This week Ian R worked on improving the griper unit so that it could hold up more weight. Last week Ian showed that the gripper could only hold about 5lb.

This week Steph worked on manufacturing parts for the extension arm and pivot units. She has been using the Mill and CNC in the Mech E shop and is about 60% done with all parts we need to be machined for the final robot.

### **Plans**

For next week we plan to put together as much of the final robot as possible. We plan to have an all day team meeting this Saturday and potentially a follow up meeting on Sunday. The goal is to have all parts for the extension unit, and pivot subsystems built by Friday so that we can assemble everything over the weekend.

Additionally I plan to have the cleaning unit cad and design finished by the end of the day on Friday. This way We will be able to build the cleaning unit over the weekend.

For two weeks I plan to finish construction of the cleaning unit and start on the controls of the robot.