## February 5th

Today in class I applied to get the typo on my license fixed. Then I started to work on setting up telemetry system 1. Today I hooked up the transmitter power cable to the battery. Now we are able to power the transmitter. I also helped Bates setup the receiver for system 1 in the backpack.



## February 7th

Today in class, I worked on setting up telemetry system 1. I tried to hook up the pi to the monitor. We had a lot of difficulty hooking up the pi to the monitor. The ports were too small to hook up the cables, so I decided that we should order pins for the pi, to make the setup easier. We were able to setup the monitor to the battery.

Bates added the extendable arm to the backpack, and installed the monitor. Bailey and Nathan worked on programming the pi.



## February 9th

Today in class, I continued to work on telemetry system 1. I setup the monitor and the transmitter to a battery. I added a power switch so the drivers can easily turn on the system when it is time to race. This allows us to save power while waiting in the race line. Since I did not order the pins yet, I tried one hook up the pi again. I was not successful, so I looked online for the pins.

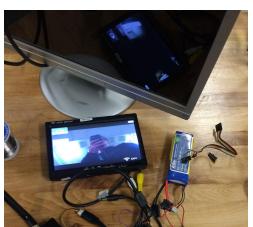
Nathan and Bailey continued to work on the Pi, and Bates worked on the backpack.



## February 10th

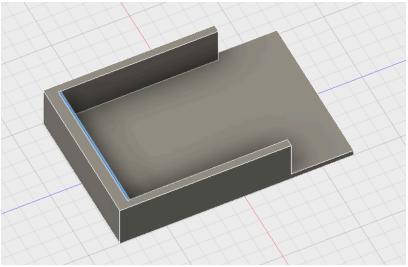
Today, the telemetry team worked on testing the 360 system. We tested the range of the system in a demo. We managed to get video signal from the other side of the great hall. We still need to test how it performs through obstacles, since the course is not an open field. Then I setup the gopro to system 1 in place of the pi, so we can test the system on monday, once we get the capture card. Then I worked on designing the transmitter casing that will be mounted on the rover for the 360 system. We are currently on schedule with the telemetry systems. We are in the testing phase, and hopefully everything works well. Then we just need to design all of the casings to install the system on the rover.











| ■ Telemetry  | 11/02/17 | 02/23/18 |
|--|----------|----------|
| ■ Task Force Objectives                                | 11/02/17 | 12/04/17 |
| Solar Cell Task Design                                 | 11/02/17 | 11/07/17 |
| Solar Cell Task Assembly (Task 3)                      | 11/27/17 | 12/04/17 |
| Liquid Retrieval Gear Design 1 (Task 5)                | 11/27/17 | 11/27/17 |
| Liquid Retrieval Gear Assembly 1                       | 11/27/17 | 11/30/17 |
| Liquid Retrieval Gear Design 2                         |          |          |
| Liquid Retrieval Gear Assembly 2                       |          |          |
| Soil Retrieval Gear Design (Task 1)                    | 11/30/17 | 12/01/17 |
| Soil Retrieval Gear Assembly                           | 12/01/17 | 12/04/17 |
| Photo Filter Design (Task 2)                           | 11/30/17 | 11/30/17 |
| Photo Filter Assembly                                  | 11/30/17 | 12/03/17 |
| ■ Telemetry System One: Analog Sensors and Video (TS1) | 12/08/17 | 02/23/18 |
| Full Telemetry Explanation to Nate and Bailey          | 12/08/17 | 12/08/17 |
| Talk to Frame People for Telemetry and Task Placement  | 12/11/17 | 01/26/18 |
| Brainstorm and Discuss options for TS1                 | 12/11/17 | 12/14/17 |
| Order All Major Components for TS1                     | 12/15/17 | 12/15/17 |
| Assemble the Antennae and Cameras and Test Range       | 01/04/18 | 01/08/18 |
| Design and Assemble Housings for TS1                   | 01/09/18 | 02/02/18 |
| Code the UI for the Telemetry Data                     | 01/04/18 | 02/16/18 |
| Finish and Test System One                             | 02/09/18 | 02/23/18 |
|  |          |          |
| Telemetry System Two: 360 Video (TS2)                  | 01/12/18 | 04/11/18 |
| Telemetry Report                                       | 03/08/18 | 03/08/18 |