

Weekly Report

1. My *Goals* from last week

- Use *Charlie* to take a lot of photos for the data sets.
- Hopefully get an answer on how to fix *Bravo*.
- Install the new hard drive in *Alpha*'s NUC.
- Start assembling the 2 new rovers.

2. My *Accomplishments* this week

- Discovered the reason why *Bravo* was in a infinite rotational state.
 - i. The speakers were affecting the IMU because of the speaker's magnets.
 - ii. Started a new approach on where to place the speakers so they would not affect the IMU.
 - iii. Speakers have to be directly
- Calibrated the IMU on *Bravo*.
- Installed new hard drive for *Alpha* so we can use it again since the old hard drive was not readable anymore.

3. My *Goals* for next week

- Document all the work David and I did the summer.
- Take images outside with *Charlie* and label them in proper folders.
- David and I are leaving next Tuesday so hopefully we can do as much as we can with the lab before we leave.
- Make sure all the parts for the 2 new rovers arrived at the Swarm lab.
- Get started with deep learning if there is enough time.

4. What I need Dr. Becker to do:

- Have a follow up meeting at the end of the week to discuss progress.

Here's how to calibrate the swarmie's IMU:

<https://www.youtube.com/watch?v=pL4x7UcuZ3A>

Here you can see that the IMU is on the right hand side of the rover, right next to where the speakers use to be. The speakers have been moved to the left temporarily.

