

Weekly Status Update - 07

Team Members:

Calvin: Communication lead, meeting facilitator, and hardware/software dev

Sam: Communicator, meeting facilitator, and Software Engineer

Mitchell: Technical Lead

Douglas: Hardware Lead

Past Week Accomplishments:

Calvin emailed ETG to set up machine-room training session. Initial time did not work out and will likely be scheduled to next week.

A basic neural network was designed and implemented. It takes in sensor data and the output from the image classifier then feeds it through a couple convolutional layers. Further tests will have to be done as to what kind of neural network is the best for this task, an lstm may work better. This basic neural network was written in Keras and is currently waiting to receive input data, this may be a ways away in the project and we expect to return to this part of the project at a later date. Plans were made at the moment to just visualize the sensor data and get everything connected.

Pending Issues:

N/A

Individual Contributions:

Team Member	Contribution	Weekly Hours	Total Hours
Sam Westerlund	Worked on designing and creating the architecture for the neural network. Researched more about neural networks.	4	37
Calvin McBride	Emailed ETG about setting up machine-room training session time.	4	30

	Attended first hardware meeting and helped sort/inventory parts.		
Mitchell Freshour	Finalized PCB, lidar, and raspberry pi designs. Ordered PCB's and Lidar system through ETG. Started work on mapping out and determining timelines and needs to conduct electrical testing of PCBs, steering and drive motors power control systems, and LED Screen.	7	33
Douglas Kihlken	organized parts, went through the parts lists to figure out how to sort parts, and checked to make sure all the parts are there	3	25

Plans for Coming Week:

Calvin will continue trying to set up meeting for machine-room and look into training for tools for cutting custom parts for the rover body.

Mitchell will start work on basic electrical testing, and will try to get a better feel of what needs to be tested, and how long testing should take.

Sam will focus his work on creating a platform for viewing/visualizing sensor data. He will also look more into the neural network and creating something simple for at least other future project contributors to start.

Douglas will keep organizing parts, get baggies for sorting the parts into sections that can be worked on independently.