

Weekly Status Update - 06

Team Members:

Calvin: Communicator, meeting facilitator, and hardware/software dev
Sam: Communicator, meeting facilitator, and Software Engineer
Mitchell: Technical Lead
Douglas: Hardware Lead

Past Week Accomplishments:

.The Node.js server was completely switched over to a React app. The React app now had an image steam, classification labels stream, Google Maps marker placement, and keyboard input. The google maps marker placement interacts with the python backend, the marker placement is stored in the python backend so it remains consistent through usage of multiple ui's. The React app also takes input through the keyboard either with the arrow keys or "wasd". Key pressed information is sent over the websocket to the backend and processed into a vector of two integers there so it is compatible for the python function to control the rover.

We set up a hardware meeting to work on the rover and emailed ETG about setting up a time to take machine-room training.

Pending Issues:

We are waiting on the raspi for testing and integrating the software and hardware components. More specifically in this case the pi camera, we want to make sure that we are able to create an image/video stream instead of just sending a static file image.

Mechanical work on the rover chassis cannot begin until we have access to the machine-room for cutting body parts.

Individual Contributions:

Team Member	Contribution	Weekly Hours	Total Hours
Sam Westerlund	Finished switching over to React. Integrated keyboard input to the rover, also implemented google maps.	8	33

Calvin McBride	Got feedback from client. Got team together on weekend to discuss additional meeting times, hardware plans going forward, and what everyone will be accountable for.	4	26
Mitchell Freshour	Researched Lidar mapping integration possibilities using a Raspberry Pi. Talked to Craig about integration options, and possible electrical changes necessary.	4	26
Douglas Kihlken	Researched build docs and new processes, worked out how to organize parts so that assembly can be quick	4	22

Plans for Coming Week:

Sam will continue to work on the software. He will be working on getting the google maps marker placement completely functional and bug free. He will also work on building up a prototype model for the neural network. Bug fixing of the keyboard/ui interface will also be performed.

Calvin will setup machine-room instruction course for Calvin, Mitchell, and Douglas. He will report to our advisor meeting details and plans going forward.

Mitchell decide on integration for lidar and confirm PCB designs for our rover with any necessary changes in order to properly implement the Lidar system.

Douglas will organize parts, possibly begin assembly if the equipment is available or research how to use and requisition equipment.