

## EE/CprE/SE 491 WEEKLY REPORT 06

Oct 18th, 2024 – Oct 24th 2024

Group number: 25-34

Project title: Laser Scan Readings for Propeller Measurement

Client &/Advisor: Linden Propeller (Gary Linden) / Dr. Mani Mina

### Team Members/Role

<b>Name:</b>	<b>Role:</b>
Alan Whitehead	Testing
Elias Colsch	Client interaction
Spencer Rudin	Schematic Design
Denny Dang	Individual Component Design

### Past Week Accomplishments

<b>Name</b>	<b>Past Contributions</b>
Alan Whitehead	This week, I worked on the ultrasonic sensor setup and began working on data fusion/multi-sensor algorithms.
Elias Colsch	This week, I set up a workstation for the KEYENCE meeting and a meeting with Gary Linden. I also continued with some basic ARDUINO research, finding a general cheat sheet and some general documentation questions.
Spencer Rudin	Continued working on the IR sensor. Started calibration. Started debugging and working on improving accuracy.
Denny Dang	Kept in contact with Kyle about discounts on their products through the university. Started working on 3D CAD models of our client's current setup and future physical design changes.

### Weekly Summary:

This week, we met with Gary Linden to suggest some options we received from KEYENCE. After telling him about these options, we provided a more in-depth update on our proof of

concept. Last week, we got the ultrasonic sensor to give us values, and this week, we did more research on data fusion and started working on applying this knowledge to our proof of concept.

Name	Individual Contributions	Hours this week	HOURS Cumulative
Alan Whitehead	I continued working on the multi sensor integration proof of concept (Ultrasonic) I also continued researching data fusion algorithms. Also attempted to check in on our MIA group member	6	28
Elias Colsch	I set up a meeting with Gary Linden to discuss potential sensor options and give a more detailed update on our plans for the project. I also helped with ultrasonic sensors, specifically giving suggestions for placement and mounting. Also attempted to check in on our MIA group member	6	30
Spencer Rudin	MIA this week Maybe working on infrared sensor	???	20 + ???
Denny Dang	Continued research on existing products and applications. Kept in contact with Kyle, concluding our recent meeting. Continued helping other teammates in their contributions. Started working on 3D CAD models of our client's current setup and future physical design changes. Also attempted to check in on our MIA group member	6	28

## Plans for the upcoming week

Name	Future Contributions
Alan Whitehead	
Elias Colsch	Will continue to set up meetings with Gary Linden and

	will also continue to help out with any research or construction for our proof of concept.
Spencer Rudin	Reporting back in?
Denny Dang	Will continue research on existing products and applications. Will continue communication with Kyle. Will continue helping other teammates in their contributions. Will continue working on the 3D CAD models from Gary and Kyle.