

EE/CprE/SE 492 WEEKLY REPORT 6 (04/02/2020 - 04/16/2020)

Group number: sdmay20-27

Project title: Gauss Sensor for Magnet Array Filter

Client: Dennis O'Neel

Advisor: Dr. Mani Mina

Team Members/Role:

Muhammad Lutfi Latip -Team Manager

Irfan Rafie – Test Engineer

Vishal Patel – Meeting Scribe

Muhammad Aiman Zulkefli – Research manager

Wei-nee Long – Report Manager

o Weekly Summary

Since we transitioned into online courses, the team has ceased laboratory testing and in-person meetings. In addition, our project is a hardware-based product. Thus, we are not able to do much and just focus on completing the assignments as well as for the final presentation.

The situation of social distancing is still on-going and the team has decided to end our process of creating or modifying the prototype until the end of the semester. Also, we have decided to stop any testing using the testbench until the end of the semester.

o Past week accomplishments

1) Determining how the team would progress due to COVID-19

- a) After contacting our advisor, we determined that it is best to stop all testing and hand over the project to the next senior design team.

- b) Thus, for the rest of the semester, we would try our best to gather all the information that we gained so that it would be easier to be continued.

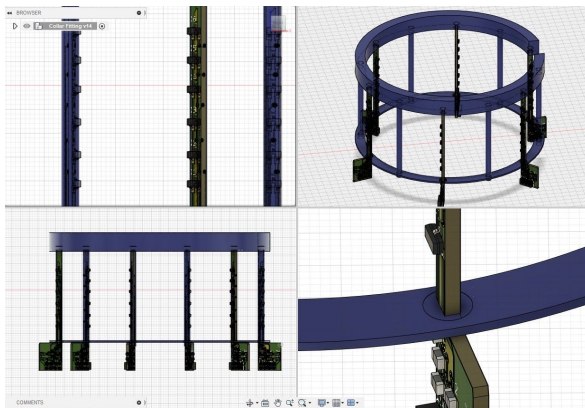
2) Discussing the future plan with our client

- a) We have been discussing with our client, Dennis, on guidance to move forward with the project.
- b) At this point, we are considering doing more analysis of the data collected from the testing we have done.

o Pending issues

1) PVC ring cannot hold the sensors firmly in one place:

- Designing the bracket to hold the sensors is challenging as we had to consider the limited and non-homogenous spacings between the magnets in the magnet array collar.
- The team is still trying to improve the design and we also decided to 3d print the bracket that would hold the sensors.



2) Determining the best model of sensors to be used:

- o This has not yet been determined as we are still waiting for the new PCB to arrive.

o **Individual contributions**

NAME	INDIVIDUAL CONTRIBUTIONS	HOURS THIS WEEK	HOURS CUMULATIVE
Muhammad Lutfi	<ul style="list-style-type: none"> - Completing course assignments. - Contacting involved parties to seek advice pertaining to COVID19 and how our team would progress. 	6	156
Irfan Rafie	<ul style="list-style-type: none"> - Completing course assignments - Contacting involved parties to seek advice pertaining to COVID19 and how our team would progress. 	6	156
Vishal Patel	<ul style="list-style-type: none"> - Completing course assignments 	6	156
Muhammad Aiman	<ul style="list-style-type: none"> - Completing course assignments 	6	156
Wei-nee Long	<ul style="list-style-type: none"> - Completing course assignments - Completing weekly report 6 	6	156

o Plans for the upcoming week

- 1) Determine how to go forward with the current situation of lockdown due to the severity of COVID-19.
- 2) Completing the requirements for the final presentation which include making a poster and also gathering material to be presented.
- 3) Completing the status document which is a document to be handed over to the client and the next team that would take over the project since we are unable to finish it due to COVID-19.