sdmay23-29: Building blocks and sub-circuits with magnetic field generators
Week 7 Report
October 27 – November 2

Team Members
Andrew Murphy — *Electrical circuit tester*
William Nichols — *Circuit and Optical Design*
Michael Lopez — *MATLAB circuit*
Steven Huynh — *Electrical circuit tester*
Umair Sarwar — *Comsol deisgn*

Summary of Progress this Report
For this week, we were tasked with refining our comsol simulation of our inductor, Investigating MATLAB simulations, refining our Circuit Design, performing live testing of the circuit, and looking into the research article on the optical portion of simulations. We also were looking into KeyCAD design as well

Pending Issues
We have no pending issues from last week's report. Our client wants us to fully understand the Comsol simulations as well as having us become more proficient in the MATLAB simulink and circuit designs.

Plans for Upcoming Reporting Period
Next week, we plan on implementing our own values onto the Comsol program. During this week, we gave it random values to see if we can get it to produce our ideal inductors. Next week we plan on actually creating an inductor design that would work for our circuit design.

Individual Contributions

Team Member	Contribution	Weekly Hours	Total Hours
Andrew Murphy	This week, Andrew worked on testing the electrical circuit design to see if we can produce a good risetime with the EE 230 kit we have.	11	82
William Nichols	This week, William primarily focused Simulink and Comsol. Seeing if Umair or Michael made a mistake in their design and giving his own input on what works and what doesn't.	3	68
Michael Lopez	This week, Michael primarily focused on Simulink. Michael came up with values for each component in the Multisim circuit and attempted to calculate the rise time based on the values through MATLAB	14	78

Steven Huynh	This week, Steven aided Andrew on the electrical circuit design and testing it's rise time using the EE 230 breadboard kit as a prototype.	8	75
Umair Sarwar	This week, Umair primarily focused on NI Multisim and Simulink. Umair came up with values for each component in the Multisim circuit and experimented with each components value. Umair also explored with a directional coupler in Simulink and did some individual optical research..	7	67

Gitlab Activity Summary

Nothing to report.