### sdmay19-30: EE 448 Stroboscope

Week 2 Report January 21 - January 27

#### **Team Members**

Katrina Choong — Chief Hardware Engineer/Timeline Manager
Meghna Chandrasekaran — Meeting Facilitator/Chief Software Engineer
Seth Noel — Chief Hardware Engineer
Kyle Zelnio — Project Manager
Jessica Bader — Scribe/Communication Manager/Chief Software Engineer

## **Summary of Progress this Report**

This first week, we had our first meeting as a group with our client. During this meeting, we established goals for the semester and made sure we were all on the same page as far as expectations and plan. We also met as a team to create a weekly schedule and define the first set of steps for both the hardware and software teams. The hardware team (Kyle, Katrina, and Seth) met to research, choose, and order a hall effect sensor so we can transition into tachometer development. The software team (Jessica and Meghna) met to work on the Python code for the GUI. We now have a GUI with all required buttons.

### **Pending Issues**

We are waiting on a motor to be added to the Senior Design lab so we can start setup and testing of the new sensor for the hardware team. The software team is moving forward with development for the current sensor, but if testing determines it will not be fit for our use, the software team will have to start development over again.

# **Plans for Upcoming Reporting Period**

During the upcoming period, Seth will change to the software team. The hardware team (Kyle and Katrina) will work to start implementing mounting of the stroboscope with the sensors. They are also going to do the required testing for the machine shop so they can start working on the mounting. The software team (Seth, Jessica, and Meghna) will work on implementing the new code for the Arduino. We will research how to interface with the new sensor and start implementation of the code.

#### **Individual Contributions**

Team Member	Contribution	Weekly Hours	Total Hours
Katrina Choong	Met with groups to schedule team, software, and hardware weekly meetings. Discussed with hardware members to switch from Tiva to Arduino. Weighed pros and cons of the baords. Purchase hall effect sensors to test.	6	6
Meghna Chandrasekaran	Worked on the Python code for the GUI with Jessica. We got the GUI to funtion properly. Worked with the group to figure out all our meeting times for the semester as a whole team, individual	6	6

	teams, and our client meetings.		
Seth Noel	Figured out what hardware had left off doing. Picked and purchased hall effect sensors to test and/or use. Researched what microcontroller to use now that we have found some issues with the Tiva.	6	6
Kyle Zelnio	Researched Pros and Cons of new Development boards b/c of new goals/direction	6	6
Jessica Bader	Worked with Meghna to fix the issues with our Python code. We now have a functioning GUI which can run events on button presses. Also met with our client to clarify direction and expectations for our second semester. Also met with the team to determine meeting times for the semester.	6	6

# **Gitlab Activity Summary**

8 pushes to branch Software from Meghna and Jessica

- Error fixes
- gitignore file update