

## **Senior Design BiWeekly: Status Report 5**

**Title:** Development of a strain visualization microsensor based on Moiré fringes

**Week 5:** Report March 16 - April 12

**Team Members:** Christian Tanberg, Matthew Thies, Ki Jun Shin and Parvaraj Bhatt

**Client & Advisor:** Dr. Long Que

**Summary of the Progress:** We met with our adviser/client, Dr Long Que. Through an online meeting, we met as a group and discussed our plans for the rest of the semester. We have new plans since the rest of the semester is now online. We finished our final lightning talk and also the contingency plan. Researched articles given to us from our advisor to better understand our project. We completed the design document 2.

### **Pending Issues:**

Christian Tanberg: None

Kijun Shin: None

Matthew Thies: None

Parvaraj Bhatt: None

### Individual Contributions:(Individual)

| <b>Name</b>                                  | <b>Contribution</b>  | <b>Working hours</b> | <b>Total Hours</b> |
|--|--|----------------------|--------------------|
| <b>Project Manager:</b><br>Christian Tanberg | Over the last few weeks I worked on several tasks for our senior design project. The first task I worked on was the lightning talk three. I also researched more projects similar to ours to better decide how we will build the moire fringe sticker. | 18                   | 37                 |
| <b>Research Lead:</b><br>Ki Jun Shin         | Set up the meeting with Dr.Long Que, and read more articles about the applications of Moire Fringe. Looked up the examples of a strain and microsensor and studied more about how we are gonna set up the transmission line.                           | 18                   | 38                 |
| <b>Test Engineer:</b><br>Matthew Thies       | Met with our technical advisor to discuss future deliverables for the rest of the semester as well as next year. Worked on the lightning talk and design document. Finally, I worked on designing how we plan to test the strain on the structure.     | 18                   | 36                 |
| <b>Design Engineer:</b><br>Parvaraj Bhatt    | Met with Dr. Long Que through Zoom. Worked on the final lightning talk Discussed what our new plans will be because of changes in classes being online Finished design document v2 Coming up with sketches for sticker                                 | 18                   | 35                 |

### Future Plans

1. Start writing our presentation for the end of the semester
2. Research and design how we will test to make sure our moire fringe will measure the strain
3. Get approval on our testing method from Dr. Long Que

4. Continue researching to help prepare us for next semester when we start the building process