EE 492 Weekly Report 2

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

Week 2: September 1 - September 14

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

Client & Advisor: Dr. Long Que

Summary of the Progress:
Over the last two weeks, we have met with our adviser, confirmed our project deliverable and worked on the matlab code. We also worked on creating the powerpoint presentation for our peer review meeting, which we had on September 10. We also created a plan to meet up per week and discuss what we have worked on individually. We also decided that we would meet up online at least once a week for about 3-4 hours to work on the project together. Finally we made some changes to the Matlab code including changing the pattern to a rectangular based instead of a hexagonal based pattern

Pending Issues:

Christian Tanberg: None

Kijun Shin: None

Matthew Thies: None

Parvaraj Bhatt: None

Individual Contributions:(Individual)

Name	Contribution	Working hours	Total Hours
Project Manager: Christian Tanberg	Over the last two weeks I finished making the changes to the calendar for the rest of the semester. I also started making changes to the matlab code our advisor gave us. One of the changes I made to the code was setting the pattern for the filter to be rectangular based instead of hexagonal. This will help us make the number pattern we plan on making to depict the strain.	6	13
Research Lead: Ki Jun Shin	This week, we had a brief presentation on Webex. Worked with the simulator in Matlab. Started to look at more codes for our project.	6	12
Test Engineer: Matthew Thies	Worked on the peer review presentation. I spent the vast majority of my time working on the matlab simulator and got a good grasp on it. I am now working on how to integrate strain as a variable.	6	12
Design Engineer: Parvaraj Bhatt	Worked on presentation for peer review meeting. Used different filters to create new patterns using matlab code. Looked into different ways to test.	7	13

Future Plans

1. Christian Tanberg: In the future I plan to start working on the distribution of the moire fringe filter. This is the next step in making the filter on matlab. To do this I will change the frequency of the patterns until I get the desired result.
2. Parvaraj Bhatt: I will work on creating patterns using the matlab code. I will try to find a way to test it as well.

3. Kijun Shin: I will keep learning more about the simulator in Matlab and start to write the code for our project.
4. Matthew Thies: I will work on how to introduce the element of strain on our code and how it should affect our Moire fringe patterns.