

EE/CprE/SE 491 WEEKLY REPORT #5

August 2019 - May 2020

Group number: 30

Project title: Building a 3D Micro-Manufacturing System using Digital Micromirror Device.

Client &/Advisor: Meng Lu

Team members:

Tong Di - Software

Di Meng - Hardware

Yu Cheng - Hardware

Shengpu Zou - Hardware

Haolun Ping - Software

Weekly Summary:

We change the light source back to the original light source and try to do simple lithography, and design models to make the projector stable and easy to adjust its position. What's more, we try to design a simple process by using "LabVIEW."

Past Week Accomplishment:

- Find a UV led PCB as our light source .
- Remove original blue led from projector's light engine
- Add external UV light source.
- Finish the assignment "Technical Challenges."

Pending Issues:

- The material we will use in lithography.
- UV alignment issues
- Patented UV power low.
- We need a reliable model to support the projector.
- We still work on the "LabVIEW."

Individual Contributions:

Name	Contribution	Weekly Hours	Cumulative Hours
Tong Di	Use "Photoshop" to design pictures for testing the projector. Keep researching on "LabVIEW."	7	36
Di Meng	Use "SOLIDWORKS" design models to	7	36

	support the projector.		
Yu Cheng	Use "SOLIDWORKS" design models to support the projector.	7	36
Shengpu Zou	Adjust the projector and do some simple tests on the projector. Find a suitable material for lithography.	7	40
Haolun Ping	Help do some simple tests on the projector and keep learning on "LabVIEW."	7	36

Plans for the upcoming week:

Tong Di - Keep learning on "LabVIEW", and do some simple lithography tests.

Di Meng - Design a model that can adjust the position of the projector.

Yu Cheng - Design a model that can adjust the position of the projector.

Shengpu Zou - Check all the components in the project, and lead the team do some simple tests.

Haolun Ping - Keep learning on "LabVIEW", and do some simple lithography tests.

Summary of weekly advisor meeting:

Dr. Lu gives us suggestions for the material which is used to image in lithography tests. And he wants us can get a simple product(produced by lithography) as quick as possible.