EE/CprE/SE 491 WEEKLY REPORT #3 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 start to make some necessary works on the projector to satisfy the requirements of our project, the first work is to find a suitable power supply for the projector and the second work is to find the UV light source to modify the projector. And we also keep on learning "LabVIEW" and "SOLIDWORKS". What's more, we try to operate the motorized stage by using the driver.

Past Week Accomplishment:

- Find a suitable power supply.
- Find a UV light LED source.

Pending Issues:

- It's very difficult to disassemble the projector.
- The size of the UV light LED source is not suitable.
- We aren't familiar with the software "LabVIEW", and we don't know how to use "LabVIEW" to operate the motorized stage.

Individual Contributions:

| Name | Contribution | Weekly Hours | Cumulative Hours |
|----------|---|--------------|------------------|
| Tong Di | Find a suitable driver and operate the motorized stage. | 7 | 22 |
| Di Meng | Use "SOLIDWORKS" design models to cover the projector. | 7 | 22 |
| Yu Cheng | Use "SOLIDWORKS" design models to cover the projector. | 7 | 22 |

| Shengpu Zou | Disassemble the projector and replace the light source. Adjust the modified projector. | 7 | 26 |
|-------------|--|---|----|
| Haolun Ping | Disassemble the projector and replace the light source. Keep learning "LabVIEW" | 7 | 22 |

Plans for the upcoming week:

Tong Di - Keep learning on "LabVIEW" and learn how to operate motorized stage. Di Meng - Design the model to cover the projector.(make sure the size is suitable) Yu Cheng - Design the model to cover the projector.(make sure the size is suitable) Shengpu Zou - Assemble the projector and adjust the projector. Haolun Ping - Keep learning on "LabVIEW" and help assemble the projector.

Summary of weekly advisor meeting:

Dr. Lu provides us a set of suitable tools to disassemble the projector. And he also gives us some suggestions on the issue "the size of UV light Led source is not suitable." And he also makes some plans for the rest of the semester.