

sdmay19-03: 3D Metal Printer - Phase II

Week 1 Report

September 2 - September 9

Team MembersThomas Waters — *Leader/Computer Engineer*Arik Rizhky-Yakobson — *Computer Engineer*Alvin Rymash — *Electrical Engineer*Jacob Gosse — *Electrical Engineer*Armand Hernandez — *Software Engineer*Carter Cahill — *Software Engineer***Summary of Progress this Report**

We visited the lab where we will be completing the project and were given specifications as to how Dr. Bigelow wanted us to complete the project. Our base goals are to complete the actual mechanical building of the 3D Printer along with a group of Mechanical Engineers and an alumni with a double major in Electrical Engineering and Mechanical Engineering. Along with this, we are expected to program the printer to be able to create a simple cube by the end of the semester. There are also a few auxilliary things that may be added if we have the time. Examples of these are inline monitoring with a thermal sensor and monitoring eddy currents to detect issues. We began to research the specifics of how 3D printers work and reviewed the project documentation from the team working on the printer before us.

Pending Issues

There are no currently pending issues. We have not begun work on the actual mechanical portion of the project, so we have not run into any problems.

Plans for Upcoming Reporting Period

We plan to continue research on the software implementation of the 3D printing process. Once this is complete, we will work with the Mechanical Engineers towards completing the build while simultaneously working on the software implementation of the project.

Individual Contributions

Team Member	Contribution	Weekly Hours	Total Hours
Thomas Waters	Was present for the meeting with Dr. Bigelow and assisted in research.	6	6
Arik Rizhky-Yakobson	Attended the meeting and assisted in research.	6	
Alvin Rymash	Attended meeting and assisted in research	6	6
Jacob Gosse	Attended meeting and assisted in research	6	6
Armand Hernandez	Attended meeting and assisted in research	6	6

Carter Cahill	Assisted in research	4	4

Gitlab Activity Summary

Nothing to report.
