

sdmay18-05: 3D Metal Printer

Week 8 Report

November 12 - November 18

Team MembersCaleb Toney — *Power Engineer*Kevin Oran — *Chief Mechanical Engineer*Ben Pieper — *Software Engineer*Rachel Shannon — *Power and electrical engineer*Jett Ptacek — *Software Engineer***Summary of Progress this Report**

We made progress in various areas led by different people. Kevin worked a lot on the Solidworks files to integrate recent design changes. Ben and Jett have continued to work on a slicing algorithm so that we can get layer by layer files of the objects to be printed. Rachel and I have been working on power systems, administrative work, and programming the pressure sensor. Each of these tasks required continued work in order to move on to the next phases of the project. Everyone has begun work on preparing for the final presentation. Often times communicating engineering work to people outside the project is almost as important as the engineering itself. We also continued our weekly meetings to incorporate feedback and thoughts from Dr. Bigelow. Our last meeting led to a change in slide type. By changing the slide type, we had to make so design changes to accommodate larger slides.

Pending Issues

There are some minor design hiccups and tweaks that still need to be integrated into the final design. Additionally, programming work is continuing to optimize slicing files.

Plans for Upcoming Reporting Period

We need to take care of some administrative work in the next week. We need to prepare for the presentation, revise the project plan and design doc, and update the website. On the technical side, we need to finish the minor design tweaks so that we can send the brackets and case to the manufacturer. We need this done before break so that they can be finished upon our return. We also will continue working on the slicing algorithm and program as well as pressure sensor programming.

Individual Contributions

Team Member	Contribution	Weekly Hours	Total Hours
Caleb Toney	Pressure sensor programming and administrative work through design doc and final presentation preparation.	6	41
Kevin Oran	Solid works file modifications and updates. Design updates.	10	56
Ben Pieper	Significant work on slicing algorithm and	8	48

