sdmay18-05: 3D Metal Printer

Week 9 Report November 19 - November 25

Team Members

Kevin Oran — CAD Designer Ben Pieper — Algorithm Developer Jett Ptacek — Software Developer Rachel Shannon — Communicator Caleb Toney — Communicator

Summary of Progress this Report

The final CAD Design is done. The Slicing algorithm works for most cases, and through the software we can now do simple tests through the UI.

Pending Issues

We still new an updated quote from Velmex. GUI has bugs with formatting and slicing Software does not have the ability to import files through a file brower

Plans for Upcoming Reporting Period

Contact the Chemistry Machine Shop with the updated CAD Design Fix the bugs that we have right now in the software Add quality of life features for the software i.e: being able to test different CAD files without closing the program, being able to browse for files, and being to have log files to show slice errors.

Individual Contributions

Team Member	Contribution	Weekly Hours	Total Hours
Kevin Oran	Kevin finished his rework his previous design to include Velmex's xslides as stepper motors. He also add all the ports and fastening areas to the design.	6	66
Ben Pieper	Ben worked on the slicing algorithm and communicated with Lee Harker to finalize the vacuum electrical feedthroughs.	5	
Jett Ptacek	Jett started the GUI for the project and mapped the algorithm to be able to print to the screen what the slice of the .stl file looks like. He also added a sample file selection window but it is not finished yet.	7	54

Rachel Shannon	She helped Kevin with some of his question to determine if his design was correct.	2	37
Caleb Toney	Caleb's oxygen analyzer arrived and he communicated with Kevin about the different ports that had to be added to the design.	3	39