

EE/CprE/SE 491 - sdmay19-31:**Multi-Purpose Automated Robotic Mixer (mpARM)**

Week 7 Report

October 22 - October 29

Client: Alexander Stoytchev/Brett Altena

Faculty Advisor: Alexander Stoytchev

Team MembersDrew Caneff — *3D Printer Specialist/CAD Designer/Accountant*Amos Hunter — *Electromechanical Specialist/Meeting Scribe*Brett Altena — *Meeting Facilitator/ Computer Vision Developer*Kristian Wadolowski — *Report manager/Front-end programmer/Computer vision Developer*Jase Grant — *Embedded Systems/ Assignment Manager***Summary of Progress this Report**

- **Blender 3D modeling** – Any custom parts we may require for our project will likely need to be 3D modeled and printed. So research into 3D modeling techniques will ensure that the necessary skills are present should the need arise.
- **New mounting design** – Created a drawing showing the new top-down (upside down) mounting of the robotic arm. This change in orientation required that a new frame be designed as well which would have sufficient bracing for the weight of the arm. Also, it was necessary to take into account the placement of the griddle, so that the spoon and spatula could reach it. Scanned and uploaded this drawing to Slack. Also used this drawing in the technical challenge lightning talk.
- **Thor arm Code**- The Thor arm has a variety of code modules meant to be loaded onto the Arduino that controls it. These coding modules are written in C and provide well written documentation for use.

Pending Issues

- Detailed budget of parts

Plans for Upcoming Reporting Period

- Start 3D printing.
- Continue ordering parts

Individual Contributions

Team Member	Contribution	Weekly Hours	Total Hours
Drew Caneff	<ul style="list-style-type: none"> ➤ Participated in group meetings ➤ Started blender 3D modeling tutorials 	12	71
Amos Hunter	<ul style="list-style-type: none"> ➤ Participated in group meetings ➤ Acquired switches ➤ Drafted new mounting design 	10	50.5

	<ul style="list-style-type: none">➤ Worked on lightning talks		
Brett Altena	<ul style="list-style-type: none">➤ Participated in group meetings➤ Facilitated meetings➤ Returned borrowed prototype materials➤ Researched computer vision on embedded systems➤ Sent purchase requests➤ Worked on lightning talks	10	76
Kristian Wadolowski	<ul style="list-style-type: none">➤ Participated in group meetings➤ Compiled and edited weekly reports➤ Began writing and compiling technical reports➤ Reviewed Thor Arm Code	14	44
Jase Grant	<ul style="list-style-type: none">➤ Participated in group meetings➤ FPGA research	3	28

Gitlab Activity Summary

Action: joined, Tue Sep 04 2018

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