### EE/CprE/SE 491 - sdmay19-31:

## Multi-Purpose Automated Robotic Mixer (mpARM)

Week 3 Report

September 18 - September 25

Client: Alexander Stoytchev/Brett Altena Faculty Advisor: Alexander Stoytchev

#### **Team Members**

Drew 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**

- One meeting was held in this time frame.
- Project plan assignment was completed and turned in.
- The robotic arm design was nearly unanimously decided to be our design of choice, however we will need to re-evaluate our project goals for this design.
- Early design documentation has started to be produced, and prototyping plans have been created.

# **Pending Issues**

- Research multiple camera types that can be used to implement a computer vision library.
- Figure out the process for 3D printing
- Research different pancake mixtures to determine the best recipe
- · Acquire the materials needed to begin prototyping

## **Plans for Upcoming Reporting Period**

Create detailed reports needed to begin prototyping.

#### **Individual Contributions**

Team Member	Contribution	Weekly Hours	Total Hours
Drew Caneff	<ul> <li>Participated in group meetings</li> <li>Contributed to project plan</li> <li>Deliberated design decisions</li> <li>Reviewed Thor arm designs</li> <li>Began concept drawings of designs</li> </ul>	10.5	22.5
Amos Hunter	<ul> <li>Participated in group meetings</li> <li>Contributed to project plan</li> <li>Deliberated design decisions</li> </ul>	4	13.5

	<ul> <li>Researched robot prototyping techniques</li> <li>Experimented with pancake recipes</li> <li>Produced research document for group</li> </ul>		
Brett Altena	<ul> <li>Planned and participated in group meetings</li> <li>Deliberated design decisions</li> <li>Further researched Camera/tripod options</li> <li>Further researched griddle options</li> </ul>	5	18
Kristian Wadolowski	<ul> <li>Participated in group meetings</li> <li>Deliberated design decisions</li> <li>Compiled &amp; edited weekly report</li> </ul>	3	11
Jase Grant	<ul> <li>Participated in group meetings</li> <li>Deliberated design decisions</li> <li>Researched machine designs and constraints</li> <li>Further researched Micro-chip options</li> </ul>	4	11

# **Gitlab Activity Summary**

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Action: joined, Tue Sep 04 2018

Author: dvcaneff

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