

EE/SE/CPRE 491 Weekly Report
MAY 1631 - Spring 2016
Week 9 Report

Advisor

Leland Harker

Client

ISU Electrical & Computer Engineering

Project Title

Automated Tool Monitoring System

Group Member

Team Leader	Edward Droesch (CprE)
Team Webmaster	Wan Zulsarhan Wan Shaari (SE)
Team Communication Leader	Ibtisam Osthram (EE)
Team Key Concept Holder	Mohamad Asyraf Samsudin (EE)
Team Key Concept Holder	Deeksha Juneja (CprE)

Meeting Attendance (March 8th, 2016)

Wan, Deeksha, Ibtisam and Lee Harker

Weekly Summary

The main goal of this week is meeting with Lee Harker to update our progress and ask his opinion over the tool detection matter

Meeting Minutes

- Discussed possible ways to design the template
- The usage of shape sticker for each tool might be inconvenience for future implementation
- Agreed on using three foams for the template
- Potentially will be buying another camera
- Discussed the foam cutting procedure

Weekly Accomplishment

- Began rigorous testing of templates.

Plan for Coming Week

- Continue testing the image with the sample foam template and actual foam template
- Design a tool foam template and do the cut-out
- Design a lock mechanism using SolidWorks
- Figure out a way to solve issue with the communication protocol between Raspberry Pi and MyRio

Pending Issues

- There are issues with communication protocol between Raspberry Pi and MyRio
 - Unable to get into the MyRio file system from Raspberry Pi

Individual Contributions

- **Edward**
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- **Wan**
 - Attended the meeting with Mr. Harker to discuss the templates
 - Trying out new technique in Vision program to detect missing tools
 - Tested the communication protocol between Raspberry Pi and MyRio
- **Ibtisam**
 - Attended the meeting with Mr. Harker to discuss the templates
 - Met Wan to discuss further about new function for tools detection
 - Tested the new function in Vision program as a new to avoid from using sticker
- **Mohamad**
 - Work on independent circuit design for the drawer and lock mechanism
- **Deeksha**
 - Attended the meeting with Mr. Harker to discuss the templates
 - Second meeting with Mr. Harker to discuss the problems with earlier discussion
 - Created templates in various shapes and size to test the reliability and the efficiency of the camera.
 - Tested the difference between camera generated template and the normal image with noise.
 - Learnt about a new template creation tool from Ib and Wan which will be implemented finally.

Individual Hourly Contributions

Team Member	Weekly Hour	Cumulative Hour
Edward Droesch	0	48
Wan Zulsarhan Wan Shaari	10	88
Ibtisam Osthram	7	77

Mohamad Asyraf Samsudin	4	68
Deeksha Juneja	7	44