

EE/SE/CPRE 491 Weekly Report
MAY 1631 - Spring 2016
Week 8 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 Osthman (EE)
Team Key Concept Holder	Mohamad Asyraf Samsudin (EE)
Team Key Concept Holder	Deeksha Juneja (CprE)

Meeting Attendance (March 6th, 2016)

Wan, Deeksha, and Ibtisam

Weekly Summary

The main goal of this week is to do the testing for the different sticker pattern in the Vision Assistant script and make sure it can accurately detect how many tools are taken

Meeting Minutes

- Create a different pattern images using Paint
 - Different sizes, numbers and distances for each pattern for the testing purposes
- Test the images by creating multiple templates to enable the detection for different sizes of pattern and see what's the minimum score of detection it can go
- During the testing, we figure that the image captured by the camera have over-exposure because of the lighting. It makes the detection to be harder and accuracy to be lowered

Weekly Accomplishment

- Create five different pattern images for the sticker testing

Plan for Coming Week

- Continue image processing analysis
- Design a final tool foam template and do the laser cutting
- Design a lock mechanism using SolidWorks

Pending Issues

- Lock mechanism
- Independent sensor circuit design

Individual Contributions

- **Edward**
 - Out of town

- **Wan**
 - Tested Vision script on the different distances and brightness of images
- **Ibtisam**
 - Continued testing on the different sticker pattern
 - Tested Vision script on the different distances and brightness of images
- **Mohamad**
 - Work on independent circuit design for the drawer and lock mechanism
- **Deeksha**
 - Created the basic image templates as a temporary usage to substitute sticker foam for testing
 - Searched the sticker foam online and emailed Lee Harker about the idea to use sticker foam for the project
 - Helped with the image testing

Individual Hourly Contributions

Team Member	Weekly Hour	Cumulative Hour
Edward Driesch	0	48
Wan Zulsarhan Wan Shaari	5	73
Ibtisam Osthman	5	70
Mohamad Asyraf Samsudin	4	64
Deeksha Juneja	5	36