

EE/SE/CPRE 491 Weekly Report

MAY 1631

Week 6 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)

Meeting Attendance (October 8th, 2015)

Mr. Harker, Wan, Ibtisam and Mohamad

Weekly Summary

The main goal of this week is to work on the sensor and image processing analysis

Meeting Minutes

- Discussed issues related to:
 - Upload videos to dropbox -- if there is a case where two people come in a row and the uploading process takes longer time, might consider to store the video locally first before uploading to dropbox
 - Sensor -- which sensor will be used and works best
 - Suggestion: Distance sensor, magnetic sensor
- Suggestions for overall project:
 - Set up a light up situation to get better image and video
 - Use two separate cameras for picture and video
 - Start thinking about plan B-- what other options if current plan does not work

Weekly Accomplishment

- Had meeting with Mr Harker
- Ordered magnetic sensor
- Found alternative for image analysis and processing
 - OpenCV library
 - works with Python / C and C#
 - Image Recognition API : Recognize.im
 - Cost 300 USD / month
 - Matplot library for Python

Plan for Coming Week

- Test the sensor program
- One member should try to familiarize with LabView and Vision Software

- Install the image recognition library and try some code

Pending Issues

- Making sure that the image processing and analysis server is reliable for this project.
- Still have not decided on the design of the lock mechanism
- Have not decide how to implement tools detection

Individual Contributions

- **Edward**
 - Continue research on image analysis and processing server
- **Wan**
 - Attended meeting with advisor
 - Research on other alternative for image recognition
 - OpenCV library
 - Image Recognition API
 - Matplot library
- **Ibtisam**
 - Attended meeting with advisor
 - Research on alternative plan for tools detection
- **Mohamad**
 - Attended meeting with advisor
 - Research on alternative plan for tools detection

Individual Hourly Contributions

Team Member	Weekly Hour	Cumulative Hour
Edward Droesch	2	7
Wan Zulsarhan Wan Shaari	3	15

Ibtisam Osthram	3	12
Mohamad Asyraf Samsudin	3	14