

## **EE 491 WEEKLY REPORT 4**

**Date:** 13/02/2015

**Group number:** DEC1616

**Project title:** Surveillance of dairy animals using a smartphone-based system

**Advisor:** Meng Lu

### **Team Members/Role:**

Xin Tong: App development (Skill: X-code)

Di Zhao: Mount design and 3D printing (Skill: Solidworks)

Le Wei: Optical design (Skill: Code V)

Tianqi Luo: Assay development (fluorescence polarization assay kit)

### **Weekly Summary about the week 5**

We had two meetings this week. First we meet with our advisor Meng Lu. He asked us some progress of last week and gave us some suggestions for the next week. Our members of group met in Wednesday morning. We shared the last week work experience and make a new to do list for this week. In this week, we prepare to make a new simulation in the computer for optical to make a test for our new optical structure. If the Code V can make a successful simulation for new structure. We will use Solidworks to make a real structure for our project.

### **Past week accomplishments (please describe as what was done, by whom, when)**

Xin Tong: 1. X-code/iPhone registration; 2. Get the source code (Meng Lu will share via Dropbox); 3. Change the shape of the observation window

Tianqi Luo: 1. Contact Metabolic center for FP assay; 2. Search for FP assay kit

Le Wei: Learn to use LightTools 8.2

Di Zhao: Provide the first design of the iPhone attachable holder.

We meet on Wednesday morning and share this weeks' experience and what we learn.

## Individual contributions

<u>NAME</u>	<u>Individual Contributions</u>	<u>Hours this week</u>	<u>HOURS cumulative</u>
A	Tianqi Luo	6	23
B	Di Zhao	3	26
C	Le Wei	6	31
D	Xin Tong	5	20

## Comments and extended discussion

We do a lot work in this work. We change a new structure that will bring a lot of change for our project. Xin tong started to make some change for our app. Xin tong changes the display shape on iPhone for app design. Tianqi Luo connects the Metabolic center for FP assay and fund kits for assay. Lei Wei start use the new software to design the optical design. But the software has a lot of limited for design. So he gave up to use LightTools and continue to use code X. Di zhao still learned Solidwork.

## Plan for coming week (please describe as what, who, when)

Xin Tong: Try to indicate the polarization detector code, then give change on it to make a cycle shape indicator instead of square shape.

Tianqi Luo: Finding the assay fit for FP and CCD camera work theory for FP.

Le Wei: Learning Code V and then design the basic optical lines.

Di Zhao: Designing the iPhone holder in Soildworks.

## **Summary of weekly advisor meeting (if applicable/optional)**

We met our advisor Meng Lu at Tuesday morning 11Am. The advisor asked some questions about our work last week. We talked about our progress and difficult of our work. The advisor give Tianqi Luo a new problem to solve is about CDD camera for FP assay. Then advisor advised Le Wei to restart to use Code X for light design and asked Xin tong and Di zhao continue their work.