

## EE/CprE/SE 492 BIWEEKLY REPORT 4

10/9 - 10/22

Group number: 10

Project title: Holiday Arboreal Light Project

Client &/Advisor: Tom Daniels x 2

Team Members/Role:

Aaron - Raspberry Pi and Inter-process Communications

Rob - Android Developer

Rajiv - Web App Dev/Android Dev

Justin - Web App Dev/Android Dev

Michael - Image processing/data storage

### Weekly Summary:

#### Past Week Accomplishments:

Got the Android App to take multiple pictures and save them with a meaningful name. Worked on the PIRM slides. Base of the LED manager has been created, and some other work with PHP scripts to receive information from the Android App.

#### Pending Issues (if applicable):

#### Individual Contributions (optional but must include hours worked):

Name	Individual Contributions	Hours this week	Cumulative hours
Aaron	Worked on PIRM slides, created a base for the LED Manager script, researched into ways to monitor the state of the LED Manager/Tree, made adjustments to the illumination patterns so that the Android app can easily take images.	6	25
Rob	Worked on PIRM slides and added a function to the Android app to take a series of pictures, as well as research on the best method to send the image to the server	7.5	27
Rajiv	Currently debugging PHP scripts created to send image/video from the android application to the raspberry pi server.	6	24
Justin	Prepared for PIRM, continued to alter pages and gather information for web application, created pattern selection page and php script to create	7	19

	and write to a file.		
Michael	Worked on the PIRM slides and during our meeting after the PIRM learned exactly what my code was to function as. So I had been working out different methods to display images and wrapping my head around how it would be configured. Besides that I worked to get the coordinates and frames to add up and match.	5	26

**Comments and Extended Discussion (optional):**

**Plans for Upcoming Week:**

Name	
Aaron	Continue developing the LED Manager.
Rob	Add an async task class to the Android app to send the images to a PHP script on the web server
Rajiv	Work on the async/server side code for sending pictures on android side.
Justin	Continue to write page and scripts to send selected pattern information to LED Manager.
Michael	Firstly I will need to work on getting the values from images based on what LED I am looking at. Currently there is an issue with timing and that makes things hard to coordinate. So i'm working to see if I can make an assumption from a video to know when to start pulling images.

**Summary of Weekly Advisor Meeting:**

(Michael's findings that everyone knew) Michael discussed with Dr. Daniels about how the LED locations were going to be translated into a coordinate system for images. He learned that the math he would have to do didn't involve the actual image and that part could come later. This simplifies the math behind the translation but might mean there has to be some higher accuracy than the method I was going to try.