## sddec18-10: Holiday Reverse Programmable Light Strings

Week 4 Report March 2 - March 6

#### **Team Members**

Mir Aamid Ahbab — Electrical Engineer/Microcontroller

Rajiv Bhoopala — Web App/Server

Justin Falat — Android Dev

Aaron Hudson — Web Server/IPC communication

Michael Scholl — Android Dev/OpenCV

Robert Tyynismaa — Android Dev

### **Summary of Progress this Report**

Developed algorithm for detecting light positions using mobile application: have pseudo-code for algorithm. Worked on design document.

Split into new groups based upon better understanding of what needs to be done.

#### **Pending Issues**

Having OpenCV be included when pulling from GIT repository.

# **Plans for Upcoming Reporting Period**

Add fuses to power supply.

Work on mobile app to detect light location.

Research and/or setup web server on Raspberry Pi (once it is delivered).

#### **Individual Contributions**

Team Member	Contribution	Weekly Hours	Total Hours
Mir Aamid Ahbab	Attended Advisor and group meeting, worked on design document. Looked at what is necessary to modify power supply to make it up to spec/safer.	5	14
Rajiv Bhoopala	Attended Advisor and group meeting, worked on design document. Researched methods of IPC and how to set up a web server on a Pi.	5.5	17
Justin Falat	Attended Advisor and group meeting, worked on design document. Researched how to send signals to the Pi from an app.	5.5	15.5
Aaron Hudson	Attended Advisor and group meeting, worked on design document. Looked into AJAX for	5	15

	sending information from app to server.		
Michael Scholl	Attended Advisor and group meeting, worked on design document. Researched more into using OpenCV to detect led positions.	5.5	17.5
Robert Tyynismaa	Attended Advisor and group meeting, worked on design document. Researched necessary functions for camera operation and photo manipulation in an Android app.	5.5	18.5