

EE/CprE/SE 492 SDDec19-10

Programmable Holiday Lights

Week 6 Report

11/09/19 - 11/22/19

Client: Dr. Tom Daniels and Wife

Advisor: Dr. Tom Daniels

Team Members:

Jake Grace - Software Lead

Joe Nunez - Meeting Scribe

Chad Griggs - Report Manager

Valery Smith - Signal Processing Specialist

Thien Nguyen - Front End Dev/Web Master

Steven Williams - Hardware Lead

Past Week Accomplishments:

- Added scripts to change between AP mode and Client mode
- Filtration/Differences in Images with LED-Detection
- Ordered camera pi case

Pending Issues

- Packages can't be installed for python
- Issues installing packages/libraries on the pis without internet access
- Determined it would be a good idea to add a heatsink to the CPU on the camera pi's they're pretty inexpensive
- The camera pi is in desperate need of a case, one was ordered and it will need to be installed

Plans for Coming Weeks

- Start making updates to final report documentation
- Design final poster
- Place the camera pi in the new camera-picase™
- Install heatsinks to the camera and tree pi CPUs

Individual Contributions

Team Member	Weekly Contribution	Weekly Hours	Total Hours
Jake Grace	<p>Installed ZMQ on camera Pi, struggled to install it on tree pi without internet. Tried to get it out of AP and on wifi, heavy struggle. Ran into issues with Python not finding installed modules.</p> <p>Moved all useful files to a newer SD card with newer python installed to allow ZMQ installation</p>	15	49
Joe Nunez	<p>Worked on updated the treesolv.py program to take the input provided by Jake's code. Met with Dr. Daniels to discuss the output of the code in relation to the tree. Attempted to work on the code to ensure that it's giving accurate output based on the input. Briefly worked with steven to figure out issues with the tree displaying incorrectly on the web app based on the output from the code.</p>	7	40
Thien Nguyen	<p>Assisted Jake in providing more filtration to the light-detection system. It will now compare the differences between a non-LED light and an LED (any similarities will be ignored). With Steven, created an AP/Client Script. Troubleshooted Python/PIP.</p>	7	24
Chad Griggs	<p>Met with group to continue discussing integration. Looked for options for a case and heatsinks for the camera pi. Started updating diagrams for final report/poster.</p>	5	30
Valery Smith	<p>I supervised other team members, took pictures and documented the project. I also filled out some functions in the main program, including the jsons to display lights functions. And documented patterns displayed on the lights. It was a good time.</p>	4	36
Steven Williams	<p>Worked with Thien to make scripts to switch between AP mode and Client mode. Also troubleshoot issues with python versions and</p>	4	48

	packages		
--	----------	--	--