BI-WEEKLY STATUS REPORT

|  |  |
| --- | --- |
| Subject: Visual Light Communication |  |
| Period Ending: 10/03/2018 |  |

|  |
| --- |
| ACTIVITIES COMPLETED THIS WEEK |
| **Completed Deliverables:**   * Built VLC modules for both transmitter and receiver * Managed to develop transmitter system by cutting socket wire rather than bulb wires * Wrote basic code for flashing lightbulb in order to determine how fast the Arduino can sample the light * **Determined that the Arduino is feasible for VLC based on these tests and information from the Disney papers. ADC prescaler value must be changed for higher ADC sampling rates. Sender and receiver code must be interrupt based rather than using delays.** * Previous Arduino code using delays would not work properly for higher data rates given that delays in Arduino are known to be inaccurate in the order of milliseconds * Decided on using Manchester schema to code VLC |

|  |
| --- |
| ACTIVITIES TO BE STARTED NEXT WEEK |
| * Meet with Dr. Valvano to determine results of the tests and figure out solutions to ambient light interference * Begin writing Arduino code for transmitter and receiver |

|  |
| --- |
| LONG TERM PROJECTS |
| * Write software for Arduino transmitter and receiver |