Updated Gantt Chart of Project Schedule (11/25/15)

| | | | | | | Sep-1 | 5 | (| Oct-15 | | Nov-1 | 5 | Dec-15 | Jan-16 | Feb | o-16 | | Mar-16 | i i | A | pr-16 |
|----|---|------------|------------|-------------|-----------------------|----------|-------|-------|-------------|------|---------|----------|--------|----------|----------|------------|---------|---------|----------|----------|---------------|
| ID | Activity | Start | Finish | Hours | Completion Percentage | 15 17 22 | 24 29 | 1 6 8 | 15 20 22 27 | 29 3 | 5 10 12 | 17 19 24 | 1 3 8 | 21 26 28 | 2 4 9 11 | 16 18 23 2 | 5 1 3 8 | 8 10 22 | 24 29 31 | 5 7 12 1 | 4 19 21 26 28 |
| 1 | Read Manual for Interpretation of data packet from scanner | 9/15/2015 | 9/17/2015 | 3.33 | 100% | | | | | | | | | | | | | | | | |
| 2 | Research Image Registration Algorithms | 9/22/2015 | 9/24/2015 | 4.33 | 100% | | | | | | | | | | | | | | | | |
| 3 | Purchase Camera | 9/22/2015 | 10/1/2015 | N/A | 100% | | | | | | | | | | | | | | | | |
| 4 | Purchase Embedded Device | 9/22/2015 | 10/8/2015 | N/A | 100% | | | | | | | | | | | | | | | | |
| 5 | Receive VLP-16 | 9/22/2015 | 10/15/2015 | N/A | 100% | | | | | | | | | | | | | | | | |
| 6 | Test Embedded Device | 10/20/2015 | 10/20/2015 | 2.17 | 100% | | | | | | | | | | | | | | | | |
| 7 | Test Power supply to camera | 10/22/2015 | 10/27/2015 | 5.83 | 100% | | | | | | | | | | | | | | | | |
| 8 | Implement Image Registration in MATLAB | 10/22/2015 | 10/29/2015 | 7.17 | 100% | | | | | | | | | | | | | | | | |
| 9 | Implement Data Packet Read Function on Embedded Device | 10/22/2015 | 11/10/2015 | 16 | 95% | | | | | | | | | | | | | | | | |
| 10 | Test image Capture Capability of Camera | 10/29/2015 | 11/5/2015 | 7.17 | 100% | | | | | | | | | | | | | | | | |
| 11 | Implement Image Registration on Embedded Device | 11/3/2015 | 11/23/2015 | 20.83 | 10% | | | | | | | | | | | | | | | | |
| 12 | Camera Installation | 11/10/2015 | 11/17/2015 | 7.67 | 100% | | | | | | | | | | | | | | | | |
| 13 | Test Data Packet Read Function on Embedded Device | 11/12/2015 | 11/19/2015 | 6.33 | 50% | | | | | | | | | | | | | | | | |
| 14 | Interface via operating system | 11/19/2015 | 12/1/2015 | 8 | 60% | | | | | | | | | | | | | | | | |
| 15 | Test power supply to scanner | 11/23/2015 | 12/1/2015 | 3.17 | 0% | | | | | | | | | | | | | | | | |
| 16 | Implement Image Registration for Single Frame Input | 12/1/2015 | 1/21/2016 | 11 | 0% | | | | | | | | | | | | | | | | |
| 17 | Test Timing And Transmission of Data | 12/3/2015 | 1/21/2016 | 6.17 | 0% | | | | | | | | | | | | | | | | |
| 18 | Test VLP-16 Scanner | 12/3/2015 | 12/8/2015 | 3.17 | 0% | | | | | | | | | | | | | | | | |
| 19 | Process Data Packet From Scanner | 1/21/2016 | 2/2/2016 | 11.33 | 70% | | | | | | | | | | | | | | | | |
| 20 | Image Registration For Live Video | 1/26/2016 | 2/4/2016 | 11 | 0% | | | | | | | | | | | | | | | | |
| 21 | Camera Data Packet Transmission | 2/4/2016 | 2/16/2016 | 11.5 | 0% | | | | | | | | | | | | | | | | |
| 22 | Orient/Install Scanner with appropriate scan angle (15 degrees) | 2/9/2016 | 2/16/2016 | 6.17 | 0% | | | | | | | | | | | | | | | | |
| 23 | Progress Presentation | 2/18/2016 | 2/18/2016 | Deliverable | N/A | | | | | | | | | | | | | | | | |
| 24 | Student Expo Abstract | 3/10/2016 | 3/10/2016 | Deliverable | N/A | | | | | | | | | | | | | | | | |
| 25 | Test System Stability | 3/22/2016 | 3/29/2016 | Deliverable | N/A | | | | | | | | | | | | | | | | |
| 26 | Project Demonstration | 3/24/2016 | 3/24/2016 | Deliverable | N/A | | | | | | | | | | | | | | | | |
| 27 | Final Presentation (Last Lab Day) | 4/7/2016 | 4/7/2016 | Deliverable | N/A | | | | | | | | | | | | | | | | |
| 28 | Student Expo Poster Printing Deadline | 4/7/2016 | 4/7/2016 | Deliverable | N/A | | | | | | | | | | | | | | | | |
| 29 | Student Expo Poster Setup | 4/12/2016 | 4/12/2016 | Deliverable | N/A | | | | | | | | | | | | | | | | |
| 30 | Student Expo | 4/14/2016 | 4/14/2016 | Deliverable | N/A | | | | | | | | | | | | | | | | |
| 31 | Final Report (Draft) | 4/14/2016 | 4/14/2016 | Deliverable | N/A | | | | | | | | | | | | | | | | |
| 32 | Final Report | 4/28/2016 | 4/28/2016 | Deliverable | N/A | | | | | | | | | | | | | | | | |
| 33 | Final Web Page | 4/28/2016 | 4/28/2016 | Deliverable | N/A | | | | | | | | | | | | | | | | |
| 34 | Advisory Board Poster Printing Deadline | 4/28/2016 | 4/28/2016 | Deliverable | N/A | | | | | | | | | | | | | | | | |
| 35 | Advisory Board Poster Presentation | 4/28/2016 | 4/28/2016 | Deliverable | N/A | | | | | | | | | | | | | | | | |

Progress Update (11/25/15)

Juan Vazquez

I've begun attempting to create a Linux kernel on a microSD card for the Odroid, which will allow for an increase in memory efficiency. Aside from this, I've started working with Dan to implement the packet reader program onto Ubuntu Server. Currently, the program is able to run for a small period of time. Future development will involve a complete build of the Linux kernel and a complete implementation of the packet reader program.

David Bumpus

This week I reinstalled OpenCV 3.0 with the opencv_contrib libraries using OpenCV 3.0 and Cmake. After failing to successfully implement access the SIFT libraries, I attempted to install OpenCV using Python 2.7 and Python 3.4. Neither attempt was successful. To get back on schedule I will attempt to install opencv_contrib to OpenCV 2.4.

Daniel Kubik

I have now finished writing both the storage classes and the interface classes. I am now able to create a "MasterBlock" object that can receive multiple data packets, while internally storing data from these packets that fall within the desired range. Juan and I are working to install these files to the Odroid device. I am on schedule, and will continue working at the same pace. My next steps will be to start helping David with the data registration process. I have already begun reading documents that will help bring me up to speed to understand this process; I will continue reading these over Thanksgiving break.