# Updated Gantt Chart of Project Schedule (3/2/16)

	1				Sep-15	Oct-15	Nov-15	Dec-15 Jan-16	Feb-16	Mar-16	Apr-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 2	24 1 3 8 21 26 28	2 4 9 11 16 18 23 25	1 3 8 10 22 24 29 31	5 7 12 14 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	100%							
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	80%							
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	100%							
14 Interface via operating system	11/19/2015	12/1/2015	8	73%							
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	40%							
17 Test Timing And Transmission of Data	12/3/2015	1/21/2016	6.17	25%							
18 Test VLP-16 Scanner	12/3/2015	12/8/2015	3.17	100%							
19 Process Data Packet From Scanner	1/21/2016	2/2/2016	11.33	100%							
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	100%							
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		Deliverable	N/A							
28 Student Expo Poster Printing Deadline	4/7/2016		Deliverable	N/A							
29 Student Expo Poster Setup	4/12/2016		Deliverable	N/A							
30 Student Expo	4/14/2016	4/14/2016		N/A							
31 Final Report (Draft)	4/14/2016	4/14/2016		N/A							
32 Final Report	4/28/2016	4/28/2016		N/A							
33 Final Web Page	4/28/2016	4/28/2016		N/A							
34 Advisory Board Poster Printing Deadline	4/28/2016	4/28/2016		N/A							
35 Advisory Board Poster Presentation	4/28/2016	4/28/2016	Deliverable	N/A							

## Progress Update (3/2/16)

### Juan Vazquez

Implementation of arrays for Ethernet packet data has been semi-successful in that the program is able to compile and execute. However an error that is being encountered is occurring when attempting to pass the "const char\*" array data to the packet classification function. Also during the progress presentation, an error of the operating system read/write design was pointed out, and the topic of "shared memory" is currently being researched.

### David Bumpus

I have attempted to implement PCL's range image capability. There is an issue with the .pcd file being used as it contains multiple points at the x=0, y=0, z=0 location. I eliminated the zeros. However, issues persist. I have begun testing components of the source code individually. I will continue to work to develop the range image for registration of the LIDAR and image data.

#### Daniel Kubik

This week I have researched various interpolation methods and begun testing the "Barnes' Analysis" interpolation method using MATLAB. I will continue working at the same pace.