# Updated Gantt Chart of Project Schedule (1/27/16)

						Sep-15		Oct-15		Nov-15	Dec-15	Jan-16	Feb-16		Mar-16	A	Apr-16
ID	Activity	Start	Finish	Hours	Completion Percentage	15 17 22 24	29 1	1 6 8 15 20 22 27 2	29 3 5	10 12 17 19 24	1 3 8	21 <mark>26</mark> 28 3	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	70%												
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	70%												
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	10%												
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	100%												
19	Process Data Packet From Scanner	1/21/2016	2/2/2016	11.33	85%												
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	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 (1/27/16)

#### Juan Vazquez

At this time, I'm attempting to resolve a memory partition error that currently only allocates 3GB of memory space for the Ubuntu Server OS. I plan to alter the setup configuration to extend the partition to the size of the microSD card (16GB), and eventually the size of the eMMC for the final design.

## David Bumpus

I completed testing of the feature detection and matching algorithms using .ppm file. Additionally, I began installing and researching Point Cloud Library (PCL) for feature detection from VLP-16 data. I am currently compiling PCL from source. I will continue to work at the same pace.

## Daniel Kubik

Over break I continued learning registration techniques. I also worked with MATLAB to visualize using DeLaunay triangulation in the case that we will use this for depth map creation.

Now back from break, our team has come to the conclusion that Point Cloud Library (PCL) appears to have the most functionality for our lidar purposes compared to other registration methods. I have been working to install PCL to my machine and access PCL through Visual Studio. I plan to put in additional hours to ensure PCL is operational.