# Updated Gantt Chart of Project Schedule (3/23/16)

						S	ep-15	(	Oct-15		Nov-15	Dec-15	Jan-16	Feb-1	6		Mar-16			Apr-16
ID	Activity	Start	Finish	Hours	Completion Percentage	15 17	22 24 29	1 6 8	15 20 22 27 2	935	10 12 17 19 24	1 1 3 8	21 26 28	2 4 9 11 16	18 23 25	1 3 8	3 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	85%															
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	75%															
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	70%															
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	70%															
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 (3/23/16)

#### Juan Vazquez

The segmentation fault that was previously being encountered was researched further into. The error seems to be the result of an incorrect array declaration and I'm currently debugging the program code to find where the error is occurring at. I've also begun implementing the functional programs onto the EMMC.

## David Bumpus

I have written a function for blob detection to be used to register the range image and webcam image. Additionally, I have enabled the keypoint detection to return the angle and distance to the nearest keypoint as an approximation of the nearest object location.

## Daniel Kubik

In order to create a set of test data that is simpler than that of which was obtained in lab, David and I recorded camera and lidar data inside the lobby of the Renaissance Coliseum on campus. I have been using this data to create range images and practice registration techniques similar to those that were tried with the data obtained from in the lab, working to find a method that can successfully register the camera images with the lidar data.