

## WEEKLY REPORT

Group name : MAY14-08	Date: 9/7/13
Client/Advisor: Koray Celik	
Attendees/Role Nicolas Cabeen – Team Leader – Software    Todd Wegter – Communication – Mechanical Eric VanDenover – Electrical                      Xiang ‘Peter’ Wang – Software	

### ACCOMPLISHMENTS FOR PAST WEEK

WHAT	WHO	WHEN
Met with Koray and Lunabotics and discerned more specifics for project	ALL	9/13
Met to discuss rough design	ALL	9/11
Report completed and meetings scheduled	Todd	9/14
Contacted Lunabotics to inquire about LIDAR	Peter	9/11
Researched servos	Eric	-
Setup Git repository	Nicolas	9/9
Contacted Lee Harker for lab safety training for the ECpE Machining Lab	ALL	9/11
Inquired about Boyd Lab safety training	Peter	9/10

### PLAN FOR COMING WEEK/INDIVIDUAL TASKS

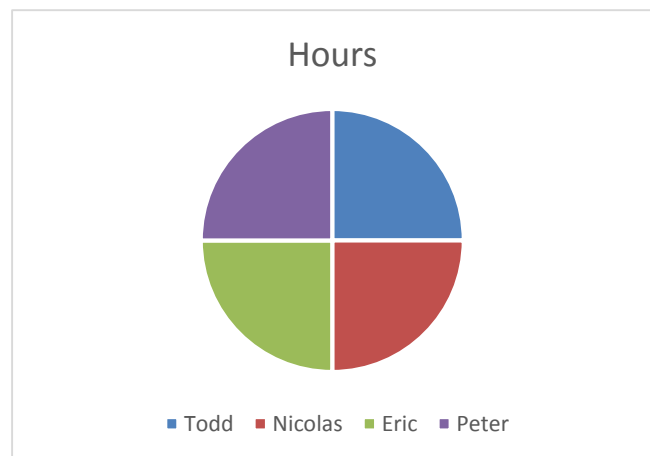
WHAT	WHO	WHEN
Continued research/pricing	ALL	-
Read manuals for LIDAR	ALL	-

### PENDING ISSUE

ISSUE	RESPONSIBILITY
Todd’s going to need to learn CAD...	Todd
Determine orientation of LIDAR for project	ALL

### INDIVIDUAL HOURLY CONTRIBUTION

NAME	HOURS
Todd	4
Nicolas	4
Eric	4
Peter	4



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Client/Advisor: Koray Celik	
Attendees/Role Nicolas Cabeen – Team Leader – Software    Todd Wegter – Communication – Mechanical Eric VanDenover – Electrical                      Xiang ‘Peter’ Wang – Software	

### ACCOMPLISHMENTS FOR PAST WEEK

WHAT	WHO	WHEN
Met with Koray to discuss standards for our project	ALL	9/20
Met to discuss progress and documentation	ALL	9/18
Report completed and meetings scheduled	Todd	9/23
Received training and access to ECpE Machining Lab	ALL	9/16
Gained access to Koray’s Lab	ALL	-
Determined responsibilities for Project Plan	ALL	9/18

### PLAN FOR COMING WEEK/INDIVIDUAL TASKS

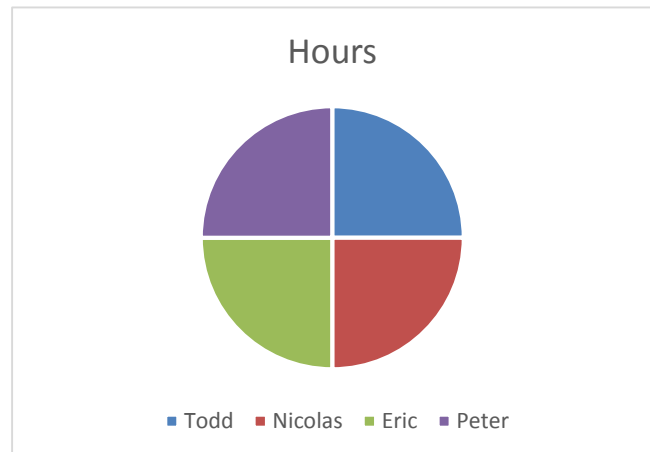
WHAT	WHO	WHEN
Complete individual homework 1	ALL	9/27
Begin work on Project Plan	ALL	-
Research what others have done	Todd	-
Researching options for graphics libraries	Peter	-
Component research (bearings, servos, etc.)	Eric	-
Read communication protocols for LIDAR	Nicolas	-
Boyd Lab access	ALL	-

### PENDING ISSUE

ISSUE	RESPONSIBILITY
Determine orientation of LIDAR for project	ALL

### INDIVIDUAL HOURLY CONTRIBUTION

NAME	HOURS
Todd	4
Nicolas	4
Eric	4
Peter	4



## WEEKLY REPORT

Group name : MAY14-08	Date: 9/21/13
Client/Advisor: Koray Celik	
Attendees/Role Nicolas Cabeen – Team Leader – Software    Todd Wegter – Communication – Mechanical Eric VanDenover – Electrical                      Xiang ‘Peter’ Wang – Software	

### ACCOMPLISHMENTS FOR PAST WEEK

WHAT	WHO	WHEN
Met with Koray to discuss standards for our project	ALL	9/20
Met to discuss progress and documentation	ALL	9/18
Report completed and meetings scheduled	Todd	9/23
Received training and access to ECpE Machining Lab	ALL	9/16
Gained access to Koray’s Lab	ALL	-
Determined responsibilities for Project Plan	ALL	9/18

### PLAN FOR COMING WEEK/INDIVIDUAL TASKS

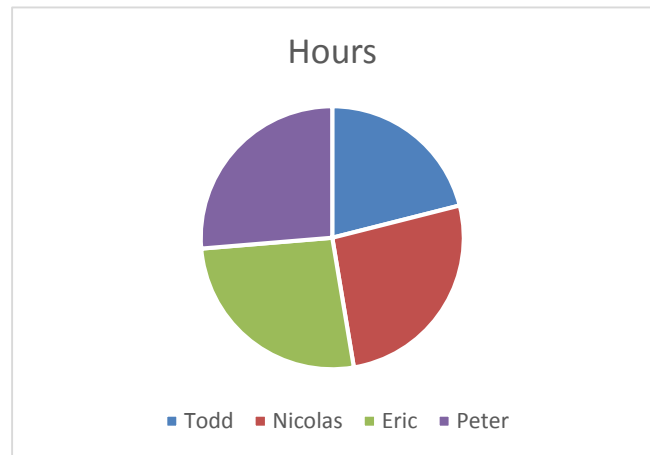
WHAT	WHO	WHEN
Complete individual homework 1	ALL	9/27
Begin work on Project Plan	ALL	-
Research what others have done	Todd	-
Researching options for graphics libraries	Peter	-
Component research (bearings, servos, etc.)	Eric	-
Read communication protocols for LIDAR	Nicolas	-
Boyd Lab access	ALL	-

### PENDING ISSUE

ISSUE	RESPONSIBILITY
Determine orientation of LIDAR for project	ALL

### INDIVIDUAL HOURLY CONTRIBUTION

<u>NAME</u>	<u>HOURS</u>
Todd	4
Nicolas	5
Eric	5
Peter	5



## WEEKLY REPORT

Group name : MAY14-08	Date: 9/28/13
Client/Advisor: Koray Celik	
Attendees/Role Nicolas Cabeen – Team Leader – Software    Todd Wegter – Communication – Mechanical Eric VanDenover – Electrical                      Xiang ‘Peter’ Wang – Software	

### ACCOMPLISHMENTS FOR PAST WEEK

WHAT	WHO	WHEN
Completed Individual Homework 1	ALL	9/27
Worked on Project Plan	Mostly Eric	-
(Not much was accomplished this week due to career fair)	-	-

### PLAN FOR COMING WEEK/INDIVIDUAL TASKS

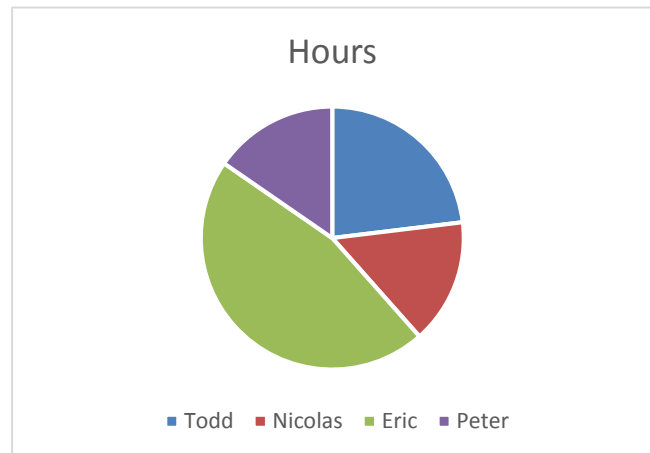
WHAT	WHO	WHEN
Complete Project Plan by Working Individually and Meeting Wednesday	ALL	10/2
Research what others have done	Todd	10/2
Researching options for graphics libraries	Peter	10/2
Read communication protocols for LIDAR	Nicolas	10/2
Boyd Lab access	ALL	10/2

### PENDING ISSUE

ISSUE	RESPONSIBILITY
-	-

### INDIVIDUAL HOURLY CONTRIBUTION

NAME	HOURS
Todd	0.5 – Weekly Report 1 – HW1
Nicolas	1 – HW1
Eric	1 – HW1 2 – Researching Components
Peter	1 – HW1



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### ACCOMPLISHMENTS FOR PAST WEEK

WHAT	WHO	WHEN
Met with other related group to consolidate efforts	ALL	10/4
Worked on Project Plan	ALL	-
Created Block Diagram, Rough Sketch, and Market/Literature Research	Todd	10/6
Coordinated meeting between the two ‘Lunabotics’ groups	Todd	10/3
Further servo research and correspondence with suppliers	Eric	-
Software Research	Nicolas & Peter	-

### PLAN FOR COMING WEEK/INDIVIDUAL TASKS

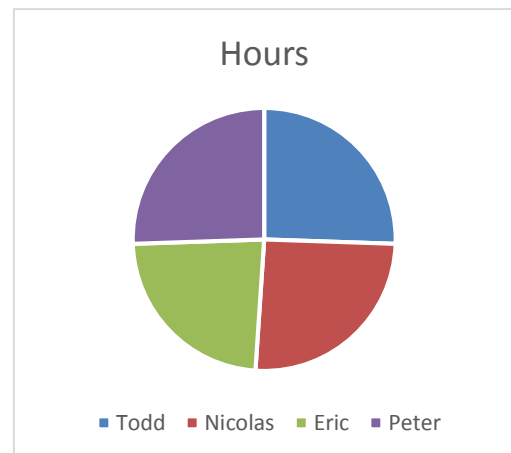
WHAT	WHO	WHEN
Compile individual sections of Project Plan into final first draft	ALL	10/9
Find a beefier servo/stepper motor to meet specs set by Koray (minimum 600 oz-in of torque – all metal gears)	Eric & Todd	10/11
Decide on which software packages to use (i.e. ROS, etc.)	Nicolas & Peter	10/11
Look into ways to minimize scan time (which slices to drop)	Nicolas	10/9
Boyd Lab access	ALL	10/11

### PENDING ISSUE

ISSUE	RESPONSIBILITY
-	-

### INDIVIDUAL HOURLY CONTRIBUTION

NAME	HOURS
Todd	0.5 – weekly report 1.5 – documentation 3 – meetings 1 – market research
Nicolas	1 – documentation 3 – meetings 2 – tech research
Eric	1 – documentation 2 – meetings 2 – Researching Components 0.5 – supplier correspondence
Peter	1.5 – documentation 1.5 – graphics software research 3 – meetings



## WEEKLY REPORT

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### ACCOMPLISHMENTS FOR PAST WEEK

WHAT	WHO	WHEN
Group Meeting	ALL	10/11
Assembled Project Plan From Individual Components	Eric	10/11
Proofread and Finished Project Plan	ALL	10/11
Further servo research and correspondence with suppliers	Eric	-
Software Research	Nicolas & Peter	-

### PLAN FOR COMING WEEK/INDIVIDUAL TASKS

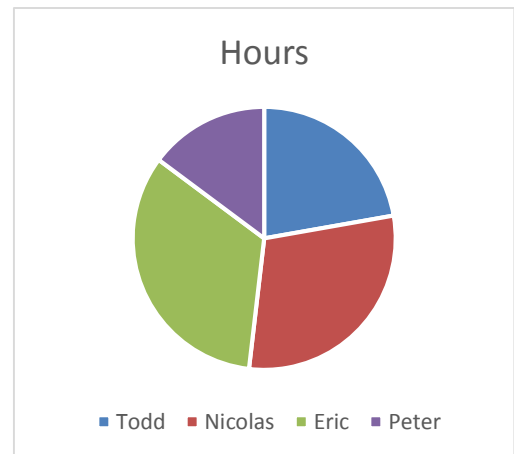
WHAT	WHO	WHEN
Looking into repairing Koray’s blown servo	Eric (& Todd)	10/18
Look into how to integrate a visual data representation with ROS	Nicolas & Peter	10/18
Look into ways to minimize scan time (which slices to drop)	Nicolas	10/18
Boyd Lab access	ALL	10/20

### PENDING ISSUE

ISSUE	RESPONSIBILITY
-	-

### INDIVIDUAL HOURLY CONTRIBUTION

NAME	HOURS
Todd	0.5 – weekly report 1 – project plan 1.5 – meetings
Nicolas	2 – project plan 2 – meetings
Eric	2 – project plan 1 – meetings 1 – Researching Components 0.5 – supplier correspondence
Peter	1 – project plan 1 – meeting



## WEEKLY REPORT

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### ACCOMPLISHMENTS FOR PAST WEEK

WHAT	WHO	WHEN
Group Meeting	Todd, Nicolas, & Peter	10/18
Discussed and Began Design Document	ALL	10/16
Began Research and Design for Servo Controller	Todd	10/20
Further servo research and correspondence with suppliers	Eric	-
ROS setup and tutorials	Nicolas & Peter	-

### PLAN FOR COMING WEEK/INDIVIDUAL TASKS

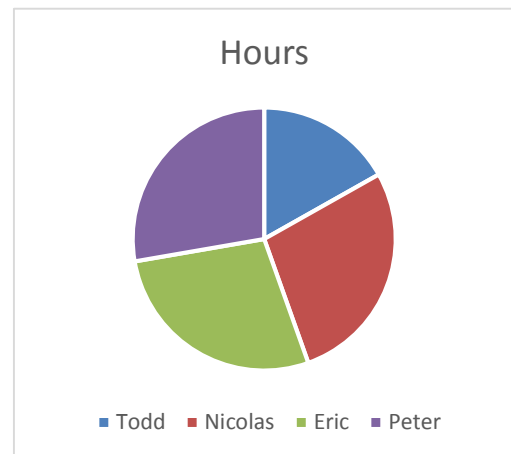
WHAT	WHO	WHEN
Look into how to integrate a visual data representation with ROS	Nicolas & Peter	10/18
Begin Designing Servo Controller and Mechanical Apparatus	Todd	10/18
Boyd Lab access	ALL	10/20

### PENDING ISSUE

ISSUE	RESPONSIBILITY
Locating a sufficiently powerful servo in our budget (~\$100)	Eric

### INDIVIDUAL HOURLY CONTRIBUTION

NAME	HOURS
Todd	0.5 – Weekly Report 0.25 – Design Document 1 – Autodesk setup 0.5 – Servo controller research 2 – Meeting
Nicolas	3 – ROS/Ubuntu Setup 0.5 – Meeting Planning 1.5 – Lab Setup 2 – Meeting
Eric	2 – Experimenting with Servo 1 – Searching For/Ordering New Servo 1.5 – Communications 1.5 – Design Document 1 – Meeting
Peter	2 – Computer Setup 3 – ROS tutorials 2 – Meeting



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### ACCOMPLISHMENTS FOR PAST WEEK

WHAT	WHO	WHEN
Group Meeting	ALL	10/25
Designing Servo Controller	Eric & Todd	10/27
Continued Servo Controller research	Todd	10/22
Power Supply research	Todd	10/22
Servo component research	Todd	10/22
Software Block Diagram	Peter	-
ROS setup and tutorials	Nicolas & Peter	-

### PLAN FOR COMING WEEK/INDIVIDUAL TASKS

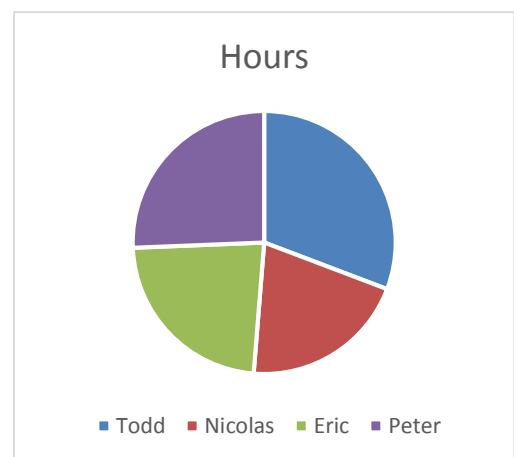
WHAT	WHO	WHEN
Continued work with ROS	Nicolas & Peter	-
Finish Servo Controller Design	Todd & Eric	-
Boyd Lab access	Peter	-

### PENDING ISSUE

ISSUE	RESPONSIBILITY
-	-

### INDIVIDUAL HOURLY CONTRIBUTION

NAME	HOURS
Todd	1.5 – Meeting 0.5 – Weekly Report 1 – Servo Controller Research 0.5 – Power Supply Research 0.5 – Mechanical Component Research 2 – Servo Controller Design
Nicolas	1.5 – Meeting 0.5 – Procuring Power Supply 2 – Software Review
Eric	1.5 – Meeting 2 – Servo Controller Design 1 – Design Document
Peter	1.5 – Meeting 2 – Software Diagram 1.5 – Software Research





## WEEKLY REPORT

Group name : MAY14-08	Date: 11/4/13
Client/Advisor: Koray Celik	
Attendees/Role Nicolas Cabeen – Team Leader – Software    Todd Wegter – Communication – Mechanical Eric VanDenover – Electrical                      Xiang ‘Peter’ Wang – Software	

### ACCOMPLISHMENTS FOR PAST WEEK

WHAT	WHO	WHEN
Group Meeting	ALL	10/29 & 11/1
First Revision of Servo Controller Completed	Eric & Todd	-
Rough GUI Design	Peter	-
ROS setup and tutorials	Nicolas & Peter	-

### PLAN FOR COMING WEEK/INDIVIDUAL TASKS

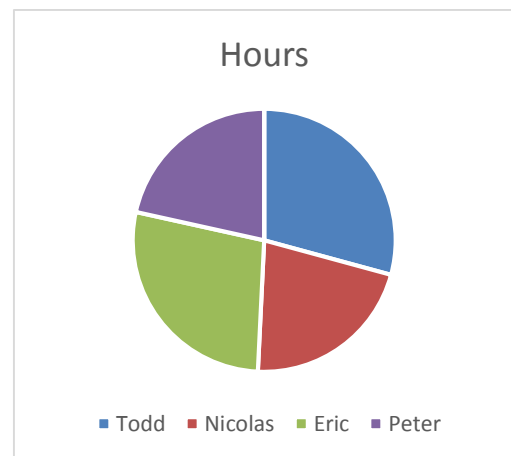
WHAT	WHO	WHEN
Continued work with ROS and User Interface	Nicolas & Peter	-
Order Servo	Eric	11/5
Breadboard Servo Controller for Proof of Concept	Todd & Eric	-
Begin Servo Controller Programming	ALL	-
Design Document	ALL	11/8
Boyd Lab access	Peter	-

### PENDING ISSUE

ISSUE	RESPONSIBILITY
-	-

### INDIVIDUAL HOURLY CONTRIBUTION

NAME	HOURS
Todd	3– Meeting 0.5 – Weekly Report 6 – Servo Controller Design
Nicolas	3 – Meeting 4 – Lab Setup
Eric	3 – Meeting 5 – Servo Controller Design 0.5 – Emailing 0.5 – Design Document
Peter	3 – Meeting 2 – Lab Setup 2 – GUI Setup



## WEEKLY REPORT

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Client/Advisor: Koray Celik	
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### ACCOMPLISHMENTS FOR PAST WEEK

WHAT	WHO	WHEN
Group Meeting	ALL	11/5 & 11/8
First Revision of Design Document Completed	ALL	11/8
Design Document Finishing Touches	Eric	11/8
ROS setup and tutorials	Nicolas & Peter	-
Servo Ordered	Eric	11/6

### PLAN FOR COMING WEEK/INDIVIDUAL TASKS

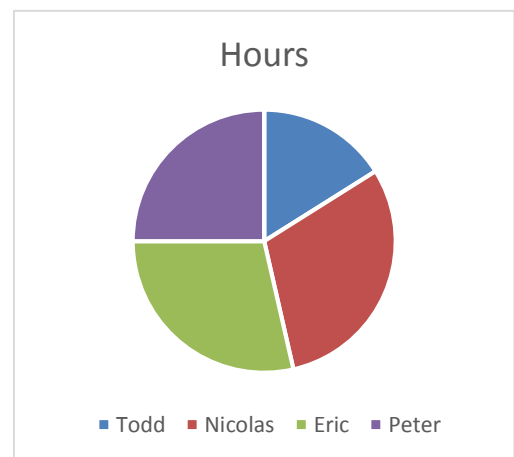
WHAT	WHO	WHEN
Continued work with ROS and User Interface	Nicolas & Peter	-
Breadboard Servo Controller for Proof of Concept	Todd & Eric	-
Begin Servo Controller Programming	Nicolas	-
Project Plan	ALL	11/15

### PENDING ISSUE

ISSUE	RESPONSIBILITY
We’ve had communication issues in locating a power supply for the LIDAR	Eric

### INDIVIDUAL HOURLY CONTRIBUTION

NAME	HOURS
Todd	2.5 – Meeting 0.5 – Weekly Report 1.5 – Design Doc
Nicolas	2 – Meeting 1.5 – PIC Documentation Review 3 – Design Doc 2 – Design Doc Review
Eric	2 – Meeting 1 – Power Supply and Servo 5 – Design Doc
Peter	1 – Meeting 2 – GUI Design 1 – Software Diagram 1 – RSO Tutorials 3 – Design Doc



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Client/Advisor: Koray Celik	
Attendees/Role Nicolas Cabeen – Team Leader – Software    Todd Wegter – Communication – Mechanical Eric VanDenover – Electrical                      Xiang ‘Peter’ Wang – Software	

### ACCOMPLISHMENTS FOR PAST WEEK

WHAT	WHO	WHEN
Group Meeting	ALL	11/12 & 11/15
First Revision of Second Revision of Project Plan	ALL	11/13
Project Plan Finishing Touches	Nicolas	11/15
Began Breadboarding Servo Controller	Todd & Eric	11/12
Created Parts List for Servo Controller	Todd & Eric	11/12
ROS setup and tutorials	Nicolas & Peter	-
Servo Picked Up	Todd	11/15
24V Power Supply Ordered	Nicolas	11/15

### PLAN FOR COMING WEEK/INDIVIDUAL TASKS

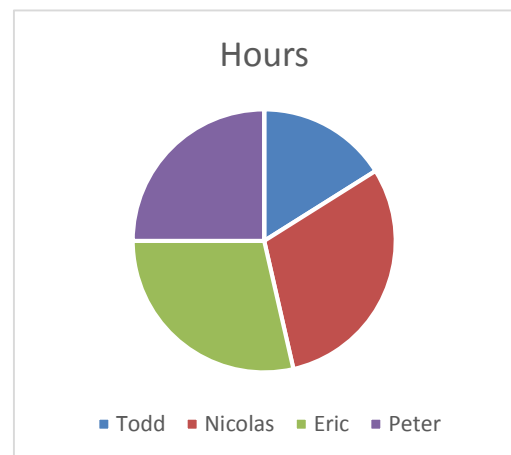
WHAT	WHO	WHEN
Continued work with ROS and User Interface	Nicolas & Peter	-
Continue Breadboard Servo Controller for Proof of Concept	Todd & Eric	-
Begin Servo Controller Programming	Nicolas	-
Website	ALL	11/20
Order Variable Power Supply (need 7.2V @ 10A)	Nicolas	11/20
Order Parts List	Todd	11/19

### PENDING ISSUE

ISSUE	RESPONSIBILITY
-	-

### INDIVIDUAL HOURLY CONTRIBUTION

NAME	HOURS
Todd	1 – Meeting      0.5 – Weekly Report 1 – Project Plan 3.5 – Breadboarding and Parts List
Nicolas	2.5 – Meeting      3 – Project Plan 2 – LIDAR Testing 1 – Power Supply Research
Eric	2.5 – Meeting      5 – Design Doc 3.5 – Breadboarding and Parts List
Peter	2 – Meeting      1 – Project Plan 2 – LIDAR Testing



## WEEKLY REPORT

Group name : MAY14-08	Date: 12/2/13 (Includes Thanksgiving Break)
Client/Advisor: Koray Celik	
Attendees/Role Nicolas Cabeen – Team Leader – Software    Todd Wegter – Communication – Mechanical Eric VanDenover – Electrical                      Xiang ‘Peter’ Wang – Software	

### ACCOMPLISHMENTS FOR PAST WEEK

WHAT	WHO	WHEN
Group Meeting	ALL	11/20
Ordered Remaining Parts & Power Supplies	Todd & Nicolas	11/19
Scheduled Presentation	ALL	11/20
Created Website	Nicolas	11/22
First Successful LIDAR Scan with ROS	Nicolas & Peter	11/12

### PLAN FOR COMING WEEK/INDIVIDUAL TASKS

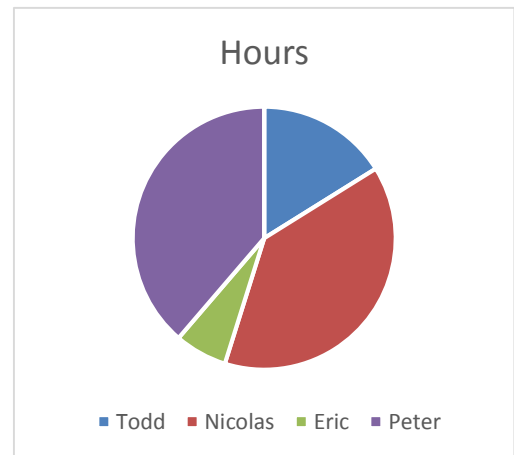
WHAT	WHO	WHEN
Continued work with ROS and User Interface	Nicolas & Peter	-
Continue Breadboard Servo Controller for Proof of Concept	Todd & Eric	-
Begin Servo Controller Programming	Nicolas	-

### PENDING ISSUE

ISSUE	RESPONSIBILITY
-	-

### INDIVIDUAL HOURLY CONTRIBUTION

NAME	HOURS
Todd	1 – Meeting 1 – Ordering Parts 0.5 – Weekly Report
Nicolas	1 – Meeting 3 – First LIDAR Scan with ROS 2 – Website
Eric	1 – Meeting
Peter	1 – Meeting 2 – Getting LIDAR Cable (RS422) 3 – Getting First LIDAR Scan with ROS



## WEEKLY REPORT

Group name : MAY14-08	Date: 12/9/13
Client/Advisor: Koray Celik	
Attendees/Role Nicolas Cabeen – Team Leader – Software    Todd Wegter – Communication – Mechanical Eric VanDenover – Electrical                      Xiang ‘Peter’ Wang – Software	

### ACCOMPLISHMENTS FOR PAST WEEK

WHAT	WHO	WHEN
Group Meeting	Todd, Eric, & Peter	12/6
Received and Setup Power Supplies	Todd	12/3
Finalized Documentation	ALL	12/6
Finishing Touches on Documentation	Todd	12/7
Finished Breadboard	Eric	12/5

### PLAN FOR COMING WEEK/INDIVIDUAL TASKS

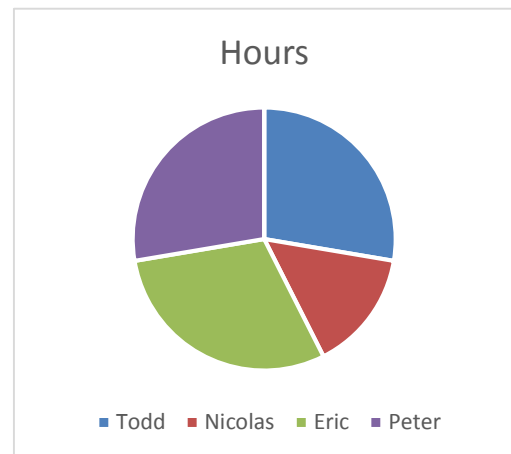
WHAT	WHO	WHEN
Continued work with ROS and User Interface	Nicolas & Peter	-
Presentation	ALL	12/11
Begin Servo Controller Programming	Todd & Eric	-

### PENDING ISSUE

ISSUE	RESPONSIBILITY
-	-

### INDIVIDUAL HOURLY CONTRIBUTION

<u>NAME</u>	<u>HOURS</u>
Todd	2.5 – Meeting 1.5 – Power Supplies 2 - Documentation 0.5 – Weekly Report
Nicolas	1 – Meeting 1.5 – Documentation 1 – Presentation
Eric	2.5 Meeting 3 – Breadboard and Testing 1.5 - Documentation
Peter	2 – Meeting 0.5 – Documentation 4 – ROS Software Libraries



## WEEKLY REPORT

Group name : MAY14-08	Date: 12/16/13
Client/Advisor: Koray Celik	
Attendees/Role Nicolas Cabeen – Team Leader – Software    Todd Wegter – Communication – Mechanical Eric VanDenover – Electrical                      Xiang ‘Peter’ Wang – Software	

### ACCOMPLISHMENTS FOR PAST WEEK

WHAT	WHO	WHEN
Group Meeting	Todd, Eric, & Peter	12/10
Final Presentation	Todd, Eric, & Peter	12/11
Confirmed operation of servo controller breadboard	Todd	12/13

### PLAN FOR COMING WEEK/INDIVIDUAL TASKS

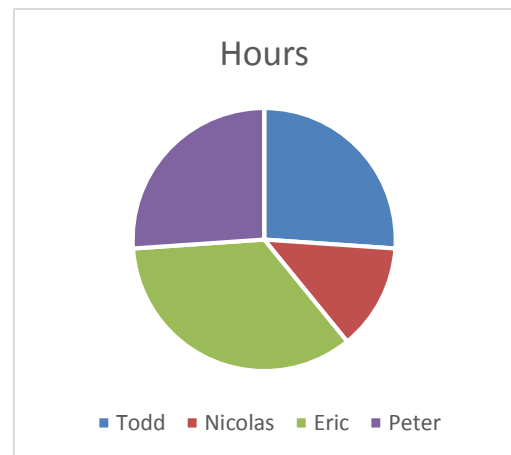
WHAT	WHO	WHEN
Continued work with ROS and User Interface	Peter	-
Mechanical CAD	Todd	-
Programming of Servo Controller	Nicolas & Eric	-

### PENDING ISSUE

ISSUE	RESPONSIBILITY
Software PWM for Servo Controller	Nicolas

### INDIVIDUAL HOURLY CONTRIBUTION

<u>NAME</u>	<u>HOURS</u>
Todd	2 – Meeting 3 – Servo Controller Software 1 – Presentation Prep
Nicolas	3 – Presentation Prep
Eric	2 – Meeting 3 – Servo Controller 1 – Soldering 2 – Presentation Prep
Peter	2 – Meeting 2 – Software and Cable 2 – Presentation Prep



## WEEKLY REPORT

Group name : MAY14-08	Date: 1/13/14 (Includes Christmas Break)
Client/Advisor: Koray Celik	
Attendees/Role Nicolas Cabeen – Team Leader – Software    Todd Wegter – Communication – Mechanical Eric VanDenover – Electrical                      Xiang ‘Peter’ Wang – Software	

### ACCOMPLISHMENTS FOR PAST WEEK

WHAT	WHO	WHEN
Christmas Break – Team was busy and out of town so not much progress made from finals week through break	-	-

### PLAN FOR COMING WEEK/INDIVIDUAL TASKS

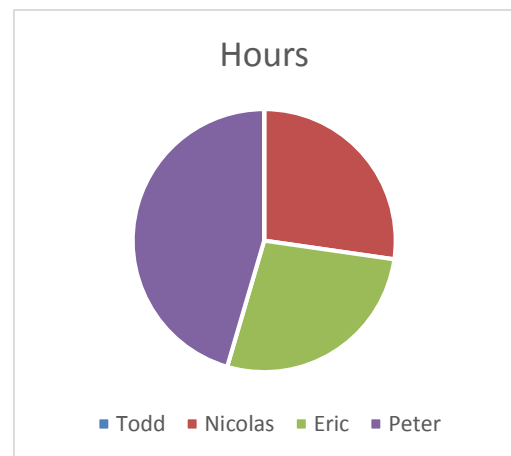
WHAT	WHO	WHEN
Continued work with ROS and User Interface	Peter	-
Mechanical CAD	Todd	1/27
Programming of Servo Controller	Nicolas and Eric	1/27

### PENDING ISSUE

ISSUE	RESPONSIBILITY
Software PWM for Servo Controller	Nicolas
USB serial interface for Servo Controller	Nicolas

### INDIVIDUAL HOURLY CONTRIBUTION

<u>NAME</u>	<u>HOURS</u>
Todd	0
Nicolas	3 – Servo Controller Programming
Eric	3 – Servo Controller Programming
Peter	5 – ROS



## WEEKLY REPORT

Group name : MAY14-08	Date: 1/20/14
Client/Advisor: Koray Celik	
Attendees/Role Nicolas Cabeen – Team Leader – Software    Todd Wegter – Communication – Mechanical Eric VanDenover – Electrical                      Xiang ‘Peter’ Wang – Software	

### ACCOMPLISHMENTS FOR PAST WEEK

WHAT	WHO	WHEN
PWM working	Eric	1/17
Pointcloud representation	Nicolas	1/17
RS232 -> RS422 migration	Peter	1/17

### PLAN FOR COMING WEEK/INDIVIDUAL TASKS

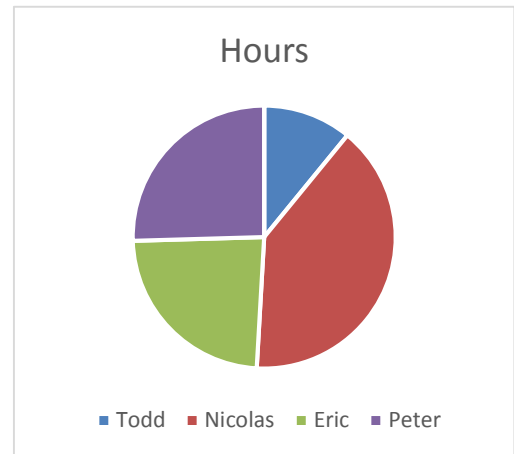
WHAT	WHO	WHEN
Continued work with ROS and User Interface	Peter	-
Mechanical CAD	Todd	1/27
Programming of Servo Controller (specifically UART)	Nicolas and Eric	1/27

### PENDING ISSUE

ISSUE	RESPONSIBILITY
Mechanical CAD and apparatus	Todd
USB serial interface for Servo Controller	Eric

### INDIVIDUAL HOURLY CONTRIBUTION

NAME	HOURS
Todd	2 – CAD 1 – Meeting
Nicolas	4 – Servo Controller Programming 4 – ROS 2 – UART 1 - Meeting
Eric	6.5 – Servo Controller Programming
Peter	4 – ROS Serial Communication 2 – RS232 -> RS422 1 - Meeting





## WEEKLY REPORT

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Attendees/Role Nicolas Cabeen – Team Leader – Software    Todd Wegter – Communication – Mechanical Eric VanDenover – Electrical                      Xiang 'Peter' Wang – Software	

### ACCOMPLISHMENTS FOR PAST WEEK

WHAT	WHO	WHEN
Board Design Completed	Todd	1/24
Serial Communication to Servo Controller	Nicolas	1/21
General Code and Design Progress	ALL	-

### PLAN FOR COMING WEEK/INDIVIDUAL TASKS

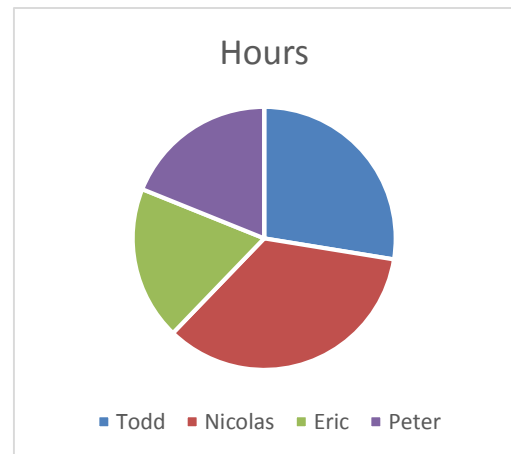
WHAT	WHO	WHEN
Continued work with ROS and User Interface	Peter	-
Mechanical CAD	Todd	2/10
Repair Servo Controller Breadboard	Eric & Nicolas	1/31
Order Servo Controller Board	Todd	1/30
Contact Lunabotics about 'Sponsorship'	Nicolas	1/31

### PENDING ISSUE

ISSUE	RESPONSIBILITY
Mechanical CAD and apparatus	Todd
Servo Controller Breadboard was accidentally burned and needs repair	Eric & Nicolas

### INDIVIDUAL HOURLY CONTRIBUTION

NAME	HOURS
Todd	2 – Meeting 2.25 – Servo Controller Board Design 3.5 – CAD 1 – Communications
Nicolas	2 – Meeting 6 – Serial Comm Code 1 – git setup and repair 2 – ROS
Eric	1 – Meeting 2 – Tuning Servo Controller 1.5 – Breadboard Repair 0.5 – Serial Comm Code 1 – RS422 Code
Peter	2 – Meeting 2 – Modified PointCloud Implementation 1 – ROS 1 – Serial Comm and GUI research



## WEEKLY REPORT

Group name : MAY14-08	Date: 2/3/14
Client/Advisor: Koray Celik	
Attendees/Role Nicolas Cabeen – Team Leader – Software    Todd Wegter – Communication – Mechanical Eric VanDenover – Electrical                      Xiang ‘Peter’ Wang – Software	

### ACCOMPLISHMENTS FOR PAST WEEK

WHAT	WHO	WHEN
Breadboard Repaired	Eric	1/31
Secured Lunabotics Funding	Nicolas	1/31
General Code and Design Progress	ALL	-

### PLAN FOR COMING WEEK/INDIVIDUAL TASKS

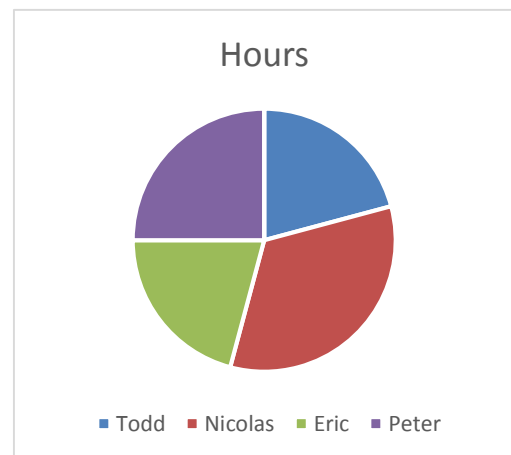
WHAT	WHO	WHEN
Continued work with ROS and User Interface	Peter	-
Mechanical CAD	Todd	2/10
Selection of Mechanical Parts	Todd	2/6
Order Servo Controller Board	Nicolas	2/5
Assembly of servo controller after arrival	Eric	-

### PENDING ISSUE

ISSUE	RESPONSIBILITY
Mechanical CAD and apparatus	Todd

### INDIVIDUAL HOURLY CONTRIBUTION

NAME	HOURS
Todd	2 – Meeting 0.5 – Ordering PCB 1.5 – Generating PCB CAM Files 0.5 – Weekly Report 1 – Getting Mechanical Advice
Nicolas	2 – Meeting 3 – Securing Lunabotics Funding 3 – Breadboard Diagnostics
Eric	2 – Meeting 2 – Fixing Servo Controller 1 – Shopping for Encoder
Peter	2 – Meeting 2 – ROS Serial Comm with Servo Controller 2 – ROS GUI Tutorials



## WEEKLY REPORT

Group name : MAY14-08	Date: 2/10/14
Client/Advisor: Koray Celik	
Attendees/Role Nicolas Cabeen – Team Leader – Software    Todd Wegter – Communication – Mechanical Eric VanDenover – Electrical                      Xiang ‘Peter’ Wang – Software	

### ACCOMPLISHMENTS FOR PAST WEEK

WHAT	WHO	WHEN
CAD rough draft completed	Todd	2/10
Encoder ordered	Nicolas and Eric	2/10
General Code and Design Progress	ALL	-

### PLAN FOR COMING WEEK/INDIVIDUAL TASKS

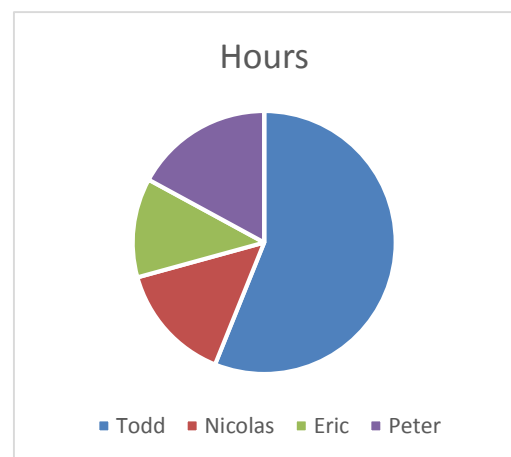
WHAT	WHO	WHEN
Continued work with ROS and User Interface	Peter	-
Finishing touches on CAD	Todd	2/17
Selection of Mechanical Parts	Todd	2/17
Order Servo Controller Board – Lunabotics	Nicolas	2/17
FEA on CAD	Todd	2/21
Assembly of servo controller after arrival	Eric	-

### PENDING ISSUE

ISSUE	RESPONSIBILITY
Creating bracket for ordered encoder	Todd
Ordering Servo Controller through Lunabotics	Nicolas

### INDIVIDUAL HOURLY CONTRIBUTION

NAME	HOURS
Todd	2 – Meeting 1 – Finding Center of Mass of Lidar 20 – CAD
Nicolas	2 – Meeting 1 – Encoder ordering 3 – Programming Servo Controller
Eric	2 – Meeting 1 – Encoder ordering 1 – compiling hardware list 1 – Programming Servo Controller
Peter	2 – Meeting 2 – GUI Development 3 – Backend Development



## WEEKLY REPORT

Group name : MAY14-08	Date: 2/17/14
Client/Advisor: Koray Celik	
Attendees/Role Nicolas Cabeen – Team Leader – Software    Todd Wegter – Communication – Mechanical Eric VanDenover – Electrical                      Xiang ‘Peter’ Wang – Software	

### ACCOMPLISHMENTS FOR PAST WEEK

WHAT	WHO	WHEN
General Code and Design Progress	ALL	-
CAD Finished	Todd	2/17

### PLAN FOR COMING WEEK/INDIVIDUAL TASKS

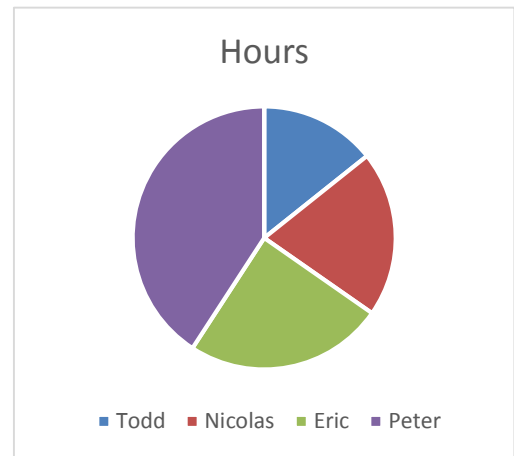
WHAT	WHO	WHEN
Continued work with ROS and User Interface	Peter	-
FEA on CAD	Todd	2/19
Begin Manufacturing Mechanical Apparatus	Todd	2/21
Assembly of servo controller after arrival	Eric	-

### PENDING ISSUE

ISSUE	RESPONSIBILITY
Ordering Servo Controller through Lunabotics	Nicolas

### INDIVIDUAL HOURLY CONTRIBUTION

<u>NAME</u>	<u>HOURS</u>
Todd	1 – Meeting 2 – CAD 0.5 – Weekly Reports
Nicolas	2 – Meeting 1 – Servo Tuning 1 – Bug Fixes 1 – Terminal Echo
Eric	2 – Meeting 3 – Servo Tuning 1 – Bug Fixes
Peter	2 – Meeting 4 – GUI Development 4 – Software Integration



## WEEKLY REPORT

Group name : MAY14-08	Date: 2/24/14
Client/Advisor: Koray Celik	
Attendees/Role Nicolas Cabeen – Team Leader – Software    Todd Wegter – Communication – Mechanical Eric VanDenover – Electrical                      Xiang ‘Peter’ Wang – Software	

### ACCOMPLISHMENTS FOR PAST WEEK

WHAT	WHO	WHEN
General Code and Design Progress	ALL	-
Bill of Materials Created	Todd	2/21
Encoder Cable Created	Eric	2/21
Started Encoder Code	Eric	2/19
Servo Integrated into ROS	Nicolas and Peter	2/21
Lunabotics Ordered our PCB	Nicolas	2/20

### PLAN FOR COMING WEEK/INDIVIDUAL TASKS

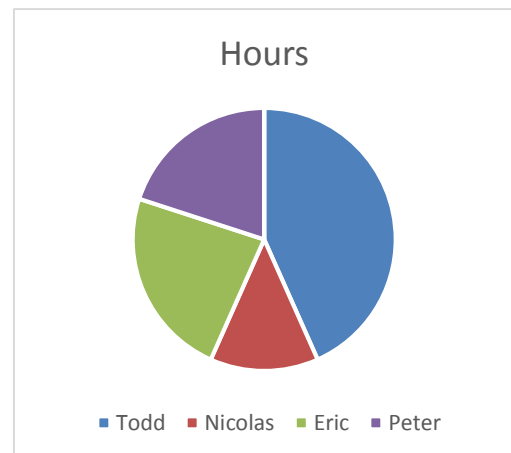
WHAT	WHO	WHEN
Continued work with ROS and User Interface	Peter	-
FEA on CAD	Todd	3/7
Begin Manufacturing Mechanical Apparatus	Todd	-
Assembly of servo controller after arrival	Eric	-

### PENDING ISSUE

ISSUE	RESPONSIBILITY
Machining Time/Cost	Todd
May need second revision of PCB if using 2 encoders or current code method doesn't work	Nicolas, Todd, and Eric

### INDIVIDUAL HOURLY CONTRIBUTION

<u>NAME</u>	<u>HOURS</u>
Todd	2 – Meeting 9.5 – CAD 1 – Bill of Materials 0.5 – Weekly Reports
Nicolas	2 – Meeting 1 – Fix ROS Serial Read Issue 1 – PCB Ordered
Eric	2 – Meeting 3 – Writing Encoder Code 1 – Temporary Encoder Cable 1 – Final Encoder Cable
Peter	2 – Meeting 1 – Fix ROS Serial Read Issue 3 – Servo Integration



## WEEKLY REPORT

Group name : MAY14-08	Date: 3/3/14
Client/Advisor: Koray Celik	
Attendees/Role Nicolas Cabeen – Team Leader – Software    Todd Wegter – Communication – Mechanical Eric VanDenover – Electrical                      Xiang 'Peter' Wang – Software	

### ACCOMPLISHMENTS FOR PAST WEEK

WHAT	WHO	WHEN
General Code and Design Progress	ALL	-
Ordered and Received Metal and Parts	Todd	2/28
PCB Soldered	Eric and Todd	3/3
Working on Encoder code	Eric and Nicolas	-
Began Threading of Software	Peter	-

### PLAN FOR COMING WEEK/INDIVIDUAL TASKS

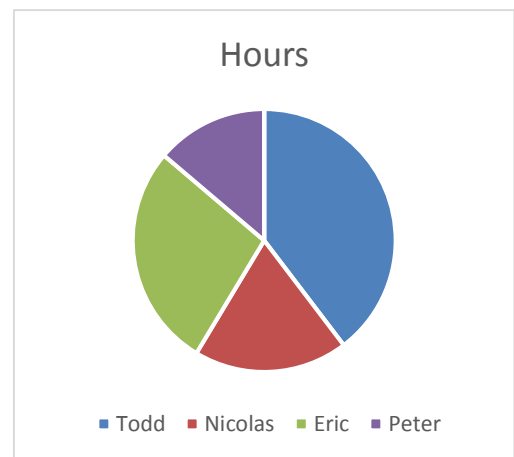
WHAT	WHO	WHEN
Continued work with ROS and User Interface	Peter	-
FEA on CAD	Todd	3/7
Complete Machining Files	Todd	3/7
Machine Parts	Todd	3/14
Working Encoder code	Eric and Nicolas	3/10

### PENDING ISSUE

ISSUE	RESPONSIBILITY
Machining Time	Todd

### INDIVIDUAL HOURLY CONTRIBUTION

NAME	HOURS
Todd	1 – Meeting 4 – CAD 3 – Machinability 3- Meeting with Koray and Lee 0.5 – Weekly Reports
Nicolas	2 – Meeting 1 – Git Setup 2 – Encoder Code
Eric	2 – Meeting 4 – Assemble PCB 2 – Encoder Code
Peter	2 – Meeting 2 – Threading and GUI



## WEEKLY REPORT

Group name : MAY14-08	Date: 3/10/14
Client/Advisor: Koray Celik	
Attendees/Role Nicolas Cabeen – Team Leader – Software    Todd Wegter – Communication – Mechanical Eric VanDenover – Electrical                      Xiang ‘Peter’ Wang – Software	

### ACCOMPLISHMENTS FOR PAST WEEK

WHAT	WHO	WHEN
General Code and Design Progress	ALL	-
Created Files for Machining	Todd	3/5
Began Machining Parts	Todd	3/6
Encoder and Associated Code is Functional	Eric and Nicolas	-
Final Cables Constructed	Eric	3/6

### PLAN FOR COMING WEEK/INDIVIDUAL TASKS

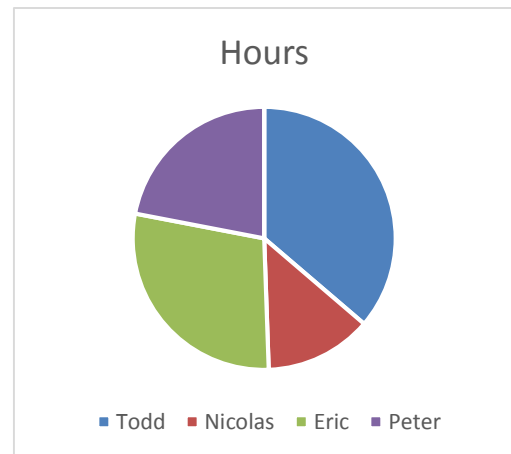
WHAT	WHO	WHEN
Fix Small Hitches in Software Execution	Peter	3/31
FEA on CAD	Todd	3/28
Machine Parts	Todd	4/4
Create Setup Scripts	Nicolas	3/24

### PENDING ISSUE

ISSUE	RESPONSIBILITY
Machining Time	Todd

### INDIVIDUAL HOURLY CONTRIBUTION

NAME	HOURS
Todd	2 – Meeting 12 – Machining 2 – Machining Files 0.5 – Weekly Report
Nicolas	2 – Meeting 3 – Encoder Code 1 – Code Fixes
Eric	2 – Meeting 1 – Making Cables 5 – Encoder Code 2 – PCB Soldering 1 – Code Fixes 2 – Second Encoder Functionality
Peter	2 – Meeting 8 – Threading, Debugging, Testing



## WEEKLY REPORT

Group name : MAY14-08	Date: 3/24/14 (Includes Spring Break)
Client/Advisor: Koray Celik	
Attendees/Role Nicolas Cabeen – Team Leader – Software    Todd Wegter – Communication – Mechanical Eric VanDenover – Electrical                      Xiang ‘Peter’ Wang – Software	

### ACCOMPLISHMENTS FOR PAST WEEK

WHAT	WHO	WHEN
General Code and Design Progress	ALL	-
Encoder Feedback for Servo Completed	Eric and Nicolas	3/14
Began Final Documentation	Eric and Nicolas	-
Threading Completed with 2 Threads	Peter	3/14

### PLAN FOR COMING WEEK/INDIVIDUAL TASKS

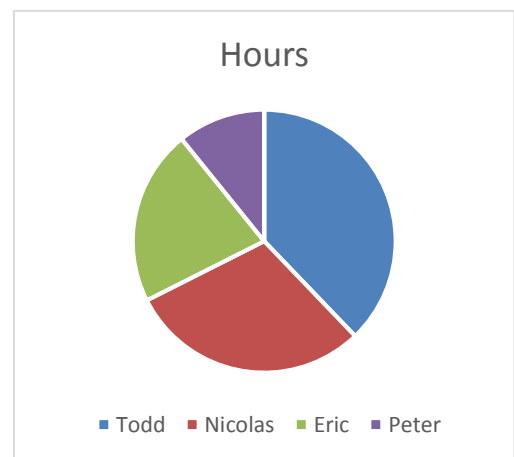
WHAT	WHO	WHEN
Fix Small Hitches in Software Execution	Peter	3/31
Switch to 3 Threads to Help Fix Hitches	Peter	3/31
FEA on CAD	Todd	3/28
Machine Parts	Todd	4/4
Final Documentation, Poster, Presentation	ALL (Nicolas and Eric Spearheading)	4/27 (rough draft of Presentation by 3/31)

### PENDING ISSUE

ISSUE	RESPONSIBILITY
Machining Time	Todd

### INDIVIDUAL HOURLY CONTRIBUTION

NAME	HOURS
Todd	1.5 – Meeting 12 – Machining 0.5 – Weekly Report
Nicolas	1.5 – Meeting 2.5 – Machining 5.5 – Encoder Code 1 – ROS/git Integration
Eric	2 – Meeting 5 – Encoder Code 1 – Poster Layout
Peter	2 – Meeting 2 – Debugging





## WEEKLY REPORT

Group name : MAY14-08	Date: 3/31/14
Client/Advisor: Koray Celik	
Attendees/Role Nicolas Cabeen – Team Leader – Software    Todd Wegter – Communication – Mechanical Eric VanDenover – Electrical                      Xiang ‘Peter’ Wang – Software	

### ACCOMPLISHMENTS FOR PAST WEEK

WHAT	WHO	WHEN
General Code and Design Progress	ALL	-
Presentation for George	Eric and Nicolas	3/29
CAD FEA, Exploded View, and Motion Study	Todd	3/27
Software (ROS) Ported to Laptop	Peter	3/28

### PLAN FOR COMING WEEK/INDIVIDUAL TASKS

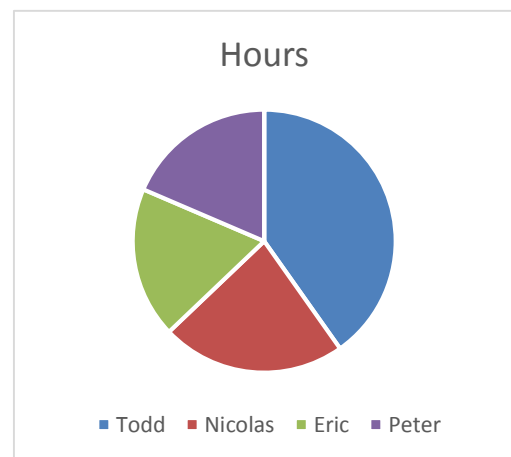
WHAT	WHO	WHEN
Fix Small Hitches in Software Execution	Peter	4/11
Switch to 3 Threads to Help Fix Hitches	Peter	4/11
Machine Parts	Todd	4/4
Final Documentation, Poster, Presentation	ALL (Nicolas and Eric Spearheading)	4/27 (rough draft of Presentation by 3/31)

### PENDING ISSUE

ISSUE	RESPONSIBILITY
Machining Time	Todd
Ensuring Smooth Operation of Apparatus (Software)	Peter

### INDIVIDUAL HOURLY CONTRIBUTION

NAME	HOURS
Todd	1 – Meeting 1 – Presentation 11 – Machining 5.5 – FEA and Animation 1 – Graphics for Presentation
Nicolas	1 – Meeting 8 – Presentation Materials 1 – Machining 1 – Presentation
Eric	1 – Meeting 1 – Presentation 6 – Presentation Materials
Peter	1 – Meeting 1 – Software Install Document 5 – Software Ported to Laptop 1 - Presentation



## WEEKLY REPORT

Group name : MAY14-08	Date: 4/7/14
Client/Advisor: Koray Celik	
Attendees/Role Nicolas Cabeen – Team Leader – Software    Todd Wegter – Communication – Mechanical Eric VanDenover – Electrical                      Xiang ‘Peter’ Wang – Software	

### ACCOMPLISHMENTS FOR PAST WEEK

WHAT	WHO	WHEN
General Code and Design Progress	ALL	-
Machining and Apparatus Completed	Todd	4/1
Proof of Concept – System Works (but still with bugs)	ALL	4/1

### PLAN FOR COMING WEEK/INDIVIDUAL TASKS

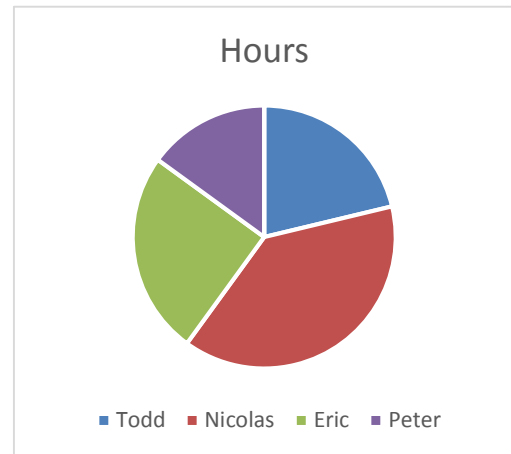
WHAT	WHO	WHEN
Fix Small Hitches in Software Execution	Peter	4/11
Switch to 3 Threads to Help Fix Hitches	Peter	4/11
Fix Coordinate System Conversion for 3D Data	Todd	4/11
VIESHEA Demo	ALL	4/11
Final Documentation, Poster, Presentation	ALL (Nicolas and Eric Spearheading)	4/27 (rough draft of Presentation by 3/31)

### PENDING ISSUE

ISSUE	RESPONSIBILITY
Ensuring Smooth Operation of Apparatus (Software)	Peter

### INDIVIDUAL HOURLY CONTRIBUTION

NAME	HOURS
Todd	2 – Meeting 5 – Machining 0.5 – Weekly Reports 1 – Graphics for VIESHEA Demo
Nicolas	2 – Meeting 3 – VIESHEA Demo Materials 5 – Machining 5.5 – Poster
Eric	2.5 – Meeting 2 – Presentation 5 – Poster 0.5 – Machining
Peter	2 – Meeting 1 – VIESHEA Demo Materials 3 – LIDAR Calibration



## WEEKLY REPORT

Group name : MAY14-08	Date: 4/14/14
Client/Advisor: Koray Celik	
Attendees/Role Nicolas Cabeen – Team Leader – Software    Todd Wegter – Communication – Mechanical Eric VanDenover – Electrical                      Xiang ‘Peter’ Wang – Software	

### ACCOMPLISHMENTS FOR PAST WEEK

WHAT	WHO	WHEN
Fixed Coordinate System Conversion	Todd	4/8
Servo Control 0 Degrees Set to Horizontal	Eric and Nicolas	4/11
Servo Controller Angle Returned After Movement	Eric and Nicolas	4/11
Progress Towards ROS Bug Elimination	Peter	-

### PLAN FOR COMING WEEK/INDIVIDUAL TASKS

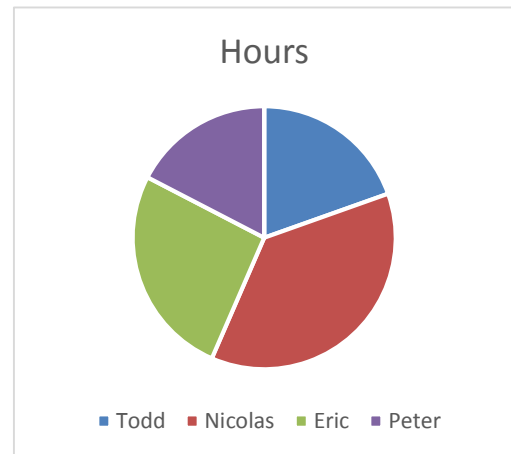
WHAT	WHO	WHEN
Final Documentation, Poster, Presentation	ALL (Nicolas and Eric Spearheading)	4/27 (rough draft of Presentation by 3/31)
General Bug Fixes	ALL	-

### PENDING ISSUE

ISSUE	RESPONSIBILITY
Diagnose and Fix ROS Crashes on Startup	Nicolas and Peter

### INDIVIDUAL HOURLY CONTRIBUTION

NAME	HOURS
Todd	1 – Meeting 3 – Coordinate System Conversion 0.5 – Weekly Reports
Nicolas	2 – Meetings 3 – ROS Updates 0.5 – Poster 3 – PIC Programming
Eric	2 – Meeting 4 – PIC Programming
Peter	2 – Meeting 2 – LIDAR Calibration



## WEEKLY REPORT

Group name : MAY14-08	Date: 4/21/14
Client/Advisor: Koray Celik	
Attendees/Role Nicolas Cabeen – Team Leader – Software    Todd Wegter – Communication – Mechanical Eric VanDenover – Electrical                      Xiang 'Peter' Wang – Software	

### ACCOMPLISHMENTS FOR PAST WEEK

WHAT	WHO	WHEN
Documentation Progress	Eric and Nicolas	-
ROS and Servo Controller Changes for Better Communication	Peter, Nicolas, and Eric	4/17

### PLAN FOR COMING WEEK/INDIVIDUAL TASKS

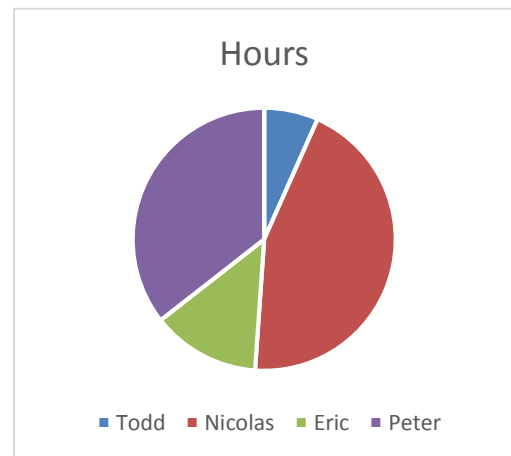
WHAT	WHO	WHEN
Final Documentation, Poster, Presentation	ALL (Nicolas and Eric Spearheading)	4/27 (rough draft of Presentation by 3/31)
General Bug Fixes	ALL	-

### PENDING ISSUE

ISSUE	RESPONSIBILITY
Diagnose and Fix ROS Crashes on Startup	Nicolas and Peter

### INDIVIDUAL HOURLY CONTRIBUTION

<u>NAME</u>	<u>HOURS</u>
Todd	1 – Meeting 0.5 - Parts Order for Replacement Parts
Nicolas	1 – Meeting 5 – Documentation 1 – ROS Bug Fixes 3 – ROS to Servo Controller Interfacing
Eric	1 – Meeting 4 – Servo Controller Bug Fixes 4 - Documentation
Peter	1 – Meeting 3 – Servo Controller Bug Fixes 4 – ROS to Servo Controller Interfacing



## WEEKLY REPORT

Group name : MAY14-08	Date: 4/28/14
Client/Advisor: Koray Celik	
Attendees/Role Nicolas Cabeen – Team Leader – Software    Todd Wegter – Communication – Mechanical Eric VanDenover – Electrical                      Xiang ‘Peter’ Wang – Software	

### ACCOMPLISHMENTS FOR PAST WEEK

WHAT	WHO	WHEN
Documentation Completed	ALL	4/27
Range Tests Completed	Nicolas and Todd	4/22
LIDAR Mode Settings Figured Out	Todd	4/22
Last ROS Bugs Worked Out	Peter and Nicolas	4/26

### PLAN FOR COMING WEEK/INDIVIDUAL TASKS

WHAT	WHO	WHEN
-	-	-

### PENDING ISSUE

ISSUE	RESPONSIBILITY
-	-

### INDIVIDUAL HOURLY CONTRIBUTION

<u>NAME</u>	<u>HOURS</u>
Todd	2 – Meeting 1.5 – Range Testing 1 – LIDAR Mode Settings
Nicolas	2 – Meeting 8 – Documentation 2 – Encoder Programming 1.5 – Range Testing
Eric	1 – Meeting 2 – Documentation
Peter	2 – Meeting 3 – PC Software Threading 3 – Final Polishing for PC Software

