

CprE/SE 491 Weekly Report 12

Dates: 4/6/2017 - 4/12/2017

Dec1709 - ALVINN

Autonomous Vehicle Mission Processor with Machine Learning

Team Leaders:	Bijan Choobineh Darren Davis	Advisors:	Dr. Jones & Dr. Zambreno
Communicator:	Tracy La Van	Client:	Josh Bertram - Rockwell Collins
Key Concept Holders:	Jesse Luedtke David Schott	Email:	dec1709@iastate.edu alvinn@iastate.edu
Webmaster:	Robert Stemig		

Weekly Summary:

The team spent time preparing and editing the Design Document v2. At the team weekly meeting, we took a group picture to add to the website and made plans for the upcoming Project Plan v3. At this point in the semester, the main focus will be on completing the documentation and preparing for the final presentation.

Past Week Accomplishments:

- **As a Group:** Worked on Design Doc v2 and final presentation.
- **Darren Davis:** Besides working on the design doc I also worked on improving the matching capabilities. Changing images lowered the number of key points leaving those that better define an 'X'. Matching is based on distance and changing this value just limits the matches to the best ones does not cause more matches with the same object. Although, some progress was made this still needs further investigation possibly looking into other methods than those we have chosen.
- **Robert Stemig:** In addition to DDv2, continued working with caffe tutorials and running on own machine at home.

Pending Issues:

- **As a Group:** IP Paperwork Update Needed from Client

Plan for Coming Week:

- **As a Group:** Roles for Project Plan v3 need to be assigned. Finish Project Plan v3 while continuing to prepare for the final presentation.
- **Tracy La Van:** Will contact advisors to see if one or both can meet to discuss DDv2 and PPv3 before final submission. We are hoping to get feedback on what can be improved upon within the documents.
- **Robert Stemig:** Will work on caffe, in addition to PPv3 and final presentation.

Individual contributions:

<u>NAME</u>	<u>Individual Contributions</u>	<u>Hours This Week</u>	<u>Cumulative Hours</u>
Bijan C.	Design Doc 2, Final Presentation	4.0	50.5
Darren D.	Design document v2 & feature detection and matching	10.0	65.0
Tracy L.	Design Document v2, Final Presentation, Weekly Reports	4.0	49.5
Jesse L.	Design Doc 2	1.0	49.0
David S.	Design document v2	2.0	36.0
Robert S.	Design document v2, updated website with new pdfs	2.0	41.0
Totals:		23.0	291.0

Summary of Weekly Team Meeting (4/6/2017):

- Team Photo for Website
- Discuss Design Document v2
 - Section editing role assignments
 - Edit sections needed to be done as a team
- Discuss Project Plan v3
 - Will be edited as soon as DDv2 is complete
 - Section editing role assignments (sign up for a section you have NOT previously edited so we have fresh eyes)
 - Section 6 Timeline - everyone needs to look over but only make comments (Tracy has the Gantt chart on her computer for editing)
 - When Bijan receives feedback on BB for PPv2, he needs to share this with the group
- Discuss when we will begin preparing the final 491 presentation

Summary of Weekly Client Meeting (4/6/2017):

https://hangouts.google.com/hangouts/_/rockwellcollins.com/senior-design

- Cancelled due to client being out of state and unavailable
- IP Paperwork Update Needed