

# CprE/SE 491 Weekly Report 13

Dates: 4/13/2017 - 4/19/2017

## Dec1709 - ALVINN

### Autonomous Vehicle Mission Processor with Machine Learning

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

#### Weekly Summary:

This past week the group met to discuss plans for the third version of the project plan and when practice for the final presentation could begin. Several group members worked together to finish the project plan. Both the project plan and design document were sent to the advisors for feedback. The PowerPoint outline for the presentation was created and practicing will begin next week. With the semester winding down and finals approaching, not much work outside of documentation and presentation preparation was accomplished.

#### Past Week Accomplishments:

- **As a Group:** The team worked on Design Doc v2 and on preparations for the final presentation.
- **Bijan Choobineh:** Added a previous literature reference to Project Plan v3
- **Darren Davis & David Schott:** Worked on Project Plan v3
- **Tracy La Van:** Worked on Project Plan v3 in addition to cleaning up Design Doc v2 and sending them out to professors.

#### Pending Issues:

- **As a Group:** N/A

#### Plan for Coming Week:

- **As a Group:** The group will be preparing for the final presentation on Tuesday (4/25) at 2:30-2:55pm. This includes putting together slides for the presentation and practicing what will be said for each slide.

**Individual contributions:**

<b><u>NAME</u></b>	<b><u>Individual Contributions</u></b>	<b><u>Hours This Week</u></b>	<b><u>Cumulative Hours</u></b>
Bijan C.	Project Plan v3	3.0	53.5
Darren D.	Design Document v2, Project Plan v3	7.5	72.5
Tracy L.	Design Document v2, Project Plan v3, Weekly Report	16.5	66.0
Jesse L.	Design Doc v2	2.0	51.0
David S.	Project Plan v3	4.0	40.0
Robert S.	Design Doc v2	4.0	45.0
Totals:		37.0	328.0

**Summary of Weekly Team Meeting (4/13/2017):**

- Design Doc v2 should be complete by Friday
- Project Plan v3 should be available to begin work sometime Friday
  - Assignments for specific sections will be made and if you want to trade with someone, ask them
  - Plan to have it finished by Sunday at 5pm
  - Sunday evening, finishing touches will be made and both DDv2 and PPv3 will be emailed to advisors in order to get any feedback on them
- Next Tuesday (4/18) plan to work on the final presentation directly following 491
  - Sign up for slides
    - Complete your slides and practice what to say prior to Thursday (4/20)
  - Plan to practice next Thursday (4/20), possibly again over the weekend if needed
  - Final practice Monday (4/24) morning (10am?)
  - Presentation Tuesday (4/25) at 2:30-2:55pm [*Plan to meet at 2pm like a normal Tuesday*]

**Summary of Weekly Advisor Meeting (4/13/2017):**

- Present: Drs. Jones & Zambreno, Bijan Choobineh, Darren Davis, Tracy La Van, Jesse Luedtke, Robert Stemig
- Absent: David Schott
- Presentation
  - Few people there, various backgrounds, have to be there and may or may not care
  - We're at the end, so they might not be very enthusiastic
  - We should not let these factors deter us
  - Time things pessimistically (don't do too much)
  - Make sure everyone knows the transitions - practice

- Darren presented the thresholding and blurring work to get rid of noise and clean up image
  - Darren - send Tracy actual jpeg/png files of the images for documents please
  - Exploring OpenCV capabilities (of what is already available) before extending it via training neural networks
- Design Doc / Project Plan
  - Need to work on Non-Functional section
  - Google link
  - (Send website as well)
- Check into OpenCV more to see what's already been done
- CprE/SE 492
  - Plan to spend at least 6 hours a week on this project
  - Month before - plan to meet and get ready for semester to start
  - Check in once a month with each other