# **CprE/SE 491 WEEKLY REPORT 1**

Date: 1/24/2017 - 1/30/2017

#### Dec1709 - ALVINN

# **Autonomous Vehicle Mission Processor with Machine Learning**

**Team Leaders:** Bijan Choobineh **Advisors:** Dr. Jones & Dr. Zambreno

Darren Davis

Communicator: Tracy La Van Client: Josh Bertram - Rockwell Collins

**Key Concept Holders:** Jesse Luedtke

David Schott Email: dec1709@iastate.edu

Webmaster: Robert Stemig

### **Weekly Summary:**

This week was mainly just a meet and greet week for us. We exchanged information, decided on team roles, considered the big picture in how to go about tackling the semester, got Senior Design Lab access, and set up Git, Slack, and our group email (dec1709@iastate.edu).

#### Past week accomplishments:

- **Bijan Choobineh:** Started communications with the Advisors.
- Darren Davis: Set-up email list and git.
- Tracy La Van: Worked on helping coordinate meetings with the advisors, the group Dec1710, and the client. Set up Weekly Reports on Slack via Google Docs.
- **Jesse Luedtke:** Researched various open source neural network libraries along with NVIDIA's deep learning platform.
- David Schott: Successfully opened my web-browser and logged in to BlackBoard.
- **Robert Stemig:** Created slack board for messaging and file transfer. Set a when2meet to determine members schedules for appropriate out of class meeting times.
- As a Group: Met with advisors (1/26) and Dec1710 (1/26); set up meeting time with Client (1/31 @ 6pm in Coover)

#### **Pending issues:**

- Bijan Choobineh: Meet with the client to discuss project details
- **Darren Davis:** Discuss project with client. Determine location of team meetings.
- Jesse Luedtke: Need to submit new phone number to group members when available.
- David Schott: Attend first regular meeting and discuss project details with client.

## **Individual contributions:**

NAME	Individual Contributions	Hours this week	HOURS cumulative
Bijan	Communications with Advisors and both Project Teams	2.5	2.5
Darren	Email and git setup. Attended all meetings.	2.5	2.5
Tracy	Meeting coordination, meetings (advisor, team, & Dec1710), Weekly Report Template on Slack	2.5	2.5
Jesse	Researched potential tools we will be using for the project	2.0	2.0
David	Attended introductory meetings with adviser's, team members, and other team (Dec1710).	2.0	2.0
Robert	Slack, when2meet	2.0	2.0
	Totals:	13.5	13.5

#### **Comments and extended discussion**

This week went well. Dec1709 appears to be a group that will work well together and we are all excited about our project. We are getting closer to being done with the initial setup 491.

# Plan for coming week:

- Bijan Choobineh: Meet with client and understand expectations. More TBD after meeting.
- Darren Davis: Meet with client.
- Tracy La Van: Will work on tutorials and meet with the client.
- Jesse Luedtke: Meet with client to get a clearer vision of the project.
- **David Schott:** Look at NVIDIA tutorials, refresh theoretical knowledge of neural networks. TBD after the initial meeting with client.
- Robert Stemig: Will meet with the client.
- **Everyone:** Will check out the two websites provided by client, Josh Bertram, and meet with client to discuss project details. We also need to ask Rockwell Collins about the NDA.
  - o Background Info & NVIDIA Tutorials
  - o Sample Video Board

# **Summary of Weekly Advisor Meeting (1/26/17):**

- Present: Dr. Jones, Bijan Choobineh, Darren Davis, Tracy La Van, Jesse Luedtke, David Schott, Robert Stemig
- Absent: Dr. Zambreno
- By week 5 we should have at least a one paragraph write up of what we would like to do with our project
- Covered the basics of 491/491 (positions, expectations)
  - o 491 is about design document & prototyping
- Recognize common pitfalls of senior design:
  - No vision from the client
  - Not blocking off time to work on 491 (be careful with putting off the course's numerous non-specific deadlines)
  - Success comes from teams having regular meetings and work times; teams lacking this often do not do well
- Think about future advisor meetings:
  - o Plan to meet once a week IF there is enough information that is worth meeting for
  - o Possibly have every other week meetings since there are two groups for this project
- TODO: Contact Rockwell Collins & Dec1710
  - Meet other team senior design should not be a competition; possibly help each other with common tools/libraries/etc. but not designs