CprE/SE 491 Weekly Report 24

Dates: 11/9/2017 - 11/15/2017

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		alvinn@iastate.edu

Weekly Summary:

Besides working on the paperwork due at the end of the semester, the team worked on setting up the testing environment for testing the neural networks. Seven neural networks will be tested: DetectNet, SSD: Single Shot MultiBox Detector, YOLOv2, Tiny YOLO, and Google MobileNets with images sizes of 150x150PX, 300x300PX, and 450x450PX. Metrics will also be pulled for video streaming with these networks.

Past Week Accomplishments:

- **Darren and David:** Worked on setting up testing. Making sure models all have timers, finding images of non plane items that might be detected as planes. Determined what planes images to test on and set up spreadsheet to document test.

- **Bijan Choobineh:** Briefly worked on the poster.

- **Tracy La Van:** Worked on the final report and was in the lab for a brief period.

- **Robert Stemig:** Outside of working with FlightGear, I didn't get much done was out of town for a majority of the week.

Pending Issues:

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

Plan for Coming Week:

- **Bijan Choobineh, David Schott, & Robert Stemig:** Will continue working on the poster.

- **Darren Davis, Tracy La Van, & Jesse Luedtke:** Will begin gathering information for the final report.

- **Darren Davis, David Schott, and Bijan Choobineh:** Will finalize testing data.

Individual contributions:

NAME	Individual Contributions	Hours This Week	Cumulative Hours
Bijan C.	Poster	2.0	45.0
Darren D.	Testing	4.0	101.0
Tracy L.	Weekly report, final report	12.5	64.5
Jesse L.	N/A	0.0	70.0
David S.	Testing	4.0	75.0
Robert S.	FlightGear	3.0	54.0
	Totals:	25.5	409.5

Summary of Weekly Client Meeting (11/14/2017):

Zoom: https://zoom.us/j/757821200

- Absent: Darren D., Bijan C.
- Brief update on where we are since the last meeting
- Update on testing
- He will help us with whatever we need
    - Can send him our final report/poster for comments

Summary of Weekly Team Meeting (11/14/2017):

Zoom: https://zoom.us/j/393292249

- Absent: Darren D., Bijan C.
- Possibly cancel advisor meeting for this week - just testing and working on final report/poster
- Poster committee met to work out their plan
    - Email Dr. Jones for clarifications - Robert will do this
- Final report has been started
- Testing scripts have been started