

# EE/CPRE/SE 492

## Weekly Report 12

Goose Chaperone

SDDEC19 - 17

09/27/2019 - 10/11/2019

*Client/Advisor:*

Randall Geiger

*Team Members:*

Weston Berg

Zihao Cao

Alec Morris

Johnson Phan

Woodrow Scott

### *Past Weeks Summary*

After some time, the basic prototype has been ordered and constructed. The motors and wheels have arrived. We collected proper Tensorflow images for our camera and will begin processing soon.

### *Past Weeks Accomplishments*

- Construct Prototype Model - Johnson
  - Bought PVC materials and tools for the construction of prototype
  - Minor adjustments made
- Tensorflow Learning - Johnson
  - Save, Load, and analyzing images for process and prediction
- Camera Driver - Weston
  - First iteration of the webcam driver for capturing the robot's surroundings
  - Worked with OpenCV
- GPS Learning - Alec
- Set up Linux dual boot - Alec
- Automated image download and processing - Woodrow

## *Pending Issues*

N/A

## *Individual Contributions*

<b>Team Member</b>	<b>Hours (Report Duration)</b>	<b>Cumulative Hours</b>
Weston Berg	10	82
Zihao Cao	6	37
Alec Morris	4	40
Johnson Phan	10	51
Woodrow Scott	8	56

## *Plans For Upcoming Weeks*

- Johnson Phan
  - Continue tensorflow training to help Woodrow
  - Group plan to connect and use prototype model
  - Reconstruct schedule
- Zihao Cao
  - Develop code for distance sensor
- Alec Morris
  - Continue GPS development.
- Weston Berg
  - Continue working with OpenCV to assist with detection of obstacles
  - Hook up small prototype and test the peripheral software
- Woodrow Scott
  - Increase training set
  - Filter poor training image results
  - Apply to tensorflow model

## *Weekly Advisor Meeting Summary*

Our discussion with our advisor is mostly on how far we've gotten and how to improve. Everyone is to continue on current plan. Two additional members of the group will take on Tensorflow. After some discussion, the prototype model has been approved and ready to be ordered and will be under construction. The motors and wheels for the prototype have arrived and was discussed in meeting.