CPRE 491
Team 45
Project Title: Prototyping and Testing Embedded Machine Learning in an Application
Date: 10-17-2021
<center>**Weekly Report #5**</center>

Members: (With team roles)
- Amy Wieland: Project Manager
- Tyler Ingebrand: Project Manager & Machine Learning Manager
- Nathan Bruck: External Hardware/Arduino Manager
- Yi Ting Liew: Task Board Manager
- Sean McFadden: Machine Learning Manager
- Nayra Lujano: Research Manager
- Chris Hazelton: Security Manager

What we've accomplish in the past week / what we've been researching:
- Amy: Gained more understanding about open AI gym
- Tyler: Worked on creating DDPG for continuous mountain car
- Yi Ting: Did researched of reinforcement learning in ML
- Sean: Learned more about DDPG and assembled one of the robots.
- Nathan: Assembled one of the robots and started experimenting with it. Still working on the Coursera ML course.
- Nayra: Additional research into AI gym and its functionality.
- Chris: Did not get what I wanted to accomplish done last week, had multiple other homeworks to do

What we are planning to do in the coming week (short 1-2 sentences on what you will be doing):
- Amy: Experiment with open AI gym, get the mountain car environment running, and try out one of the other environments that Tyler showed us.
- Tyler: Continue working on DDPG
- Nathan: Investigate the open source code for the robot and determine how much we can use. Continue with the Coursera ML course.
- Yi Ting: working on understanding and experiment the RL algorithm, play around the code from openAI which provided by Tyler
- Sean: Try to transmit data from Pi to the robot over I2C. Investigate how MuJoCo models are constructed if time permitting.
- Nayra: Work on understanding of RL algorithm and get more connected and comfortable with the progress and understanding of the project.
- Chris: Start/finish the coursera course, talk with Nathan and try to help with the open source code for the robot

Issues or concerns we had in the previous week (will be brought up in a meeting for a full conversation):

- Amy: None
- Tyler: None
- Nathan: None
- Yi Ting: none
- Sean: None
- Nayra: None
- Chris: None