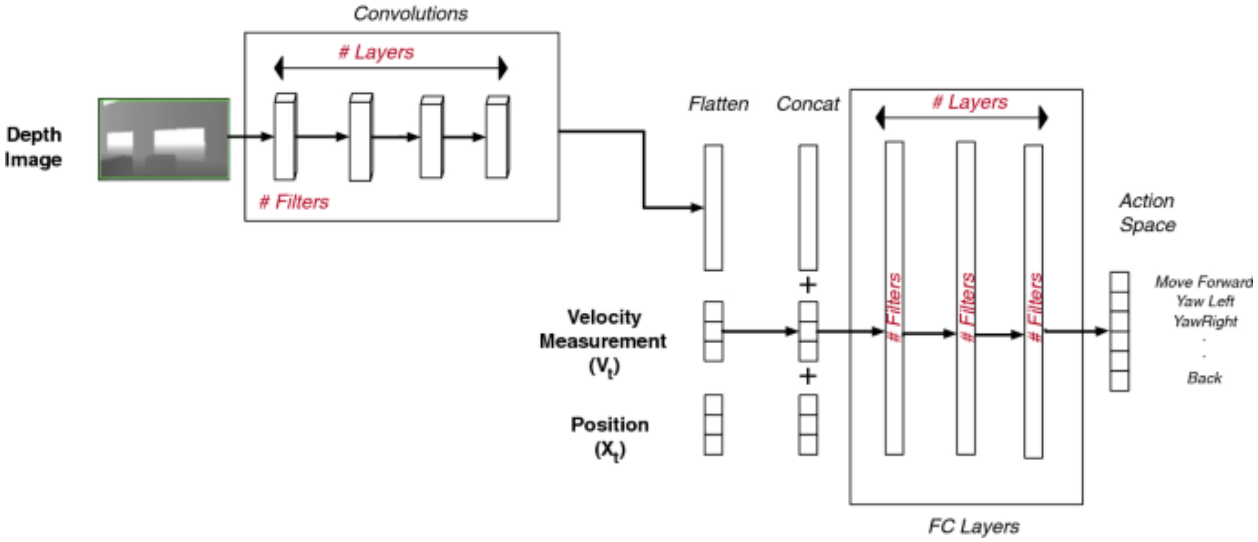
Deliverable 2

1. Problem restatement: Reinforcement Learning in Autonomous Drone with visual navigation
2. Data Preprocessing: Finished set up the gym environment and Unreal Engine that will be used for constructing the gym for learning.
3.

   a). the model is implemented by AirSim, Unreal Engine,Tensorflow and Keras. The name of the models are called Deep Q-Networks and Proximal Policy Optimization.
   Network architecture:



   c. test the drone behaviour in a new environment and calculate the collision rate. If the collision rate in the training env is really low while it has a high collision rate outside, then it is an overfitting

   d. I can't set up the training algorithm so far. The github repo is really old and all packages given have ben updated a lot so there are so many attribute errors while trying to execute the script. I am still working on solving it.

4. Don't have any training results yet.

5. Next steps: Fixing the problem that can't execute the training algorithm script. Once it is fixed, then everything should be easy.