**INSTRUCTION FOR THE CODE**

**Files**

* Model.py (containing the neural network architecture)
* Utilities.py (containing the preprocessing methods)
* connect\_drive.py (code to run the model on the simulator) – was provided by Udacity

**Creating the Virtual Environment**

* You need anaconda or miniconda to use the environment setting.
* Install all dependencies by running one of the following commands
  + **conda env create –f environments.yml**
* Activate the environment by command **‘source activate car-behavioral-cloning’**

**Udacity Simulator**

* You have to download the Udacity simulator from the link: <https://d17h27t6h515a5.cloudfront.net/topher/2017/February/58983385_beta-simulator-mac/beta-simulator-mac.zip>

**Training the model**

* If you want to train the model, we have attached the dataset that we created by playing the game. Here’s the link: <https://drive.google.com/file/d/1HOIa1hLVz6A22RNGV2zwD_AL0BfhWmJE/view?usp=sharing>
* You can download it and give the path to the python code Model.py. It will start training the network and it may take around 5-6 hours depending on your machine configuration.
* Train the model using the command **python Model.py -d ‘Path for data’**

**Using a Pre-trained model**

* We will also be submitting the model that we have trained on our machine so that you can use it directly to see how it works
* To use a pre-trained model directly, use the following command **python connect\_drive.py ‘Path for the pre-trained model’**
* Once the code starts running, open the Udacity simulator and run the autonomous mode. The car should start driving and you will be able to see the values being printed in the terminal where the code was executed.