**esources For Completing the Project**

You'll need a few files to complete the Behavioral Cloning Project.

The [**GitHub repository**](https://github.com/udacity/CarND-Behavioral-Cloning-P3) has the following files:

* drive.py: a Python script that you can use to drive the car autonomously, once your deep neural network model is trained
* writeup\_template.md: a writeup template
* video.py: a script that can be used to make a video of the vehicle when it is driving autonomously

The simulator contains two tracks.

We encourage you to drive the vehicle in training mode and collect your own training data, but we have also included sample driving data for the first track, which you can optionally use to train your network. You may need to collect additional data in order to get the vehicle to stay on the road.

Here are links to the resources that you will need:

* **[GitHub Repository](https://github.com/udacity/CarND-Behavioral-Cloning-P3" \t "_blank)**
* [**Sample Training Data**](https://d17h27t6h515a5.cloudfront.net/topher/2016/December/584f6edd_data/data.zip)
* [**Project Rubric**](https://review.udacity.com/#!/rubrics/432/view)

**Simulator Download**

* [**Linux**](https://d17h27t6h515a5.cloudfront.net/topher/2017/February/58ae46bb_linux-sim/linux-sim.zip)
* [**macOS**](https://d17h27t6h515a5.cloudfront.net/topher/2017/February/58ae4594_mac-sim.app/mac-sim.app.zip)
* [**Windows**](https://d17h27t6h515a5.cloudfront.net/topher/2017/February/58ae4419_windows-sim/windows-sim.zip)

NOTE \* On Windows 8 there is an issue where drive.py is unable to establish a data connection with the simulator. If you are running Windows 8 It is advised to upgrade to Windows 10, which should be free, and then you should be able to run the project properly.

Here are the newest updates to the simulator:

1. Steering is controlled via position mouse instead of keyboard. This creates better angles for training. Note the angle is based on the mouse distance. To steer hold the left mouse button and move left or right. To reset the angle to 0 simply lift your finger off the left mouse button.
2. You can toggle record by pressing R, previously you had to click the record button (you can still do that).
3. When recording is finished, saves all the captured images to disk at the same time instead of trying to save them while the car is still driving periodically. You can see a save status and play back of the captured data.
4. You can takeover in autonomous mode. While W or S are held down you can control the car the same way you would in training mode. This can be helpful for debugging. As soon as W or S are let go autonomous takes over again.
5. Pressing the spacebar in training mode toggles on and off cruise control (effectively presses W for you).
6. Added a Control screen
7. Track 2 was replaced from a mountain theme to Jungle with free assets , Note the track is challenging
8. You can use brake input in drive.py by issuing negative throttle values

If you are interested here is the source code for the **[simulator repository](https://github.com/udacity/self-driving-car-sim" \t "_blank)**