Raspberry pi

1. Configuration

* During the configuration of the raspberry pi 3 single-board computer, we first discovered that the provided sd card is corrupted. Henceforth, a new SD card is needed, as well  as re-installation of Ubuntu OS on Raspberry pi
* Installation followed this instruction : [Ubuntu installation](https://ubuntu.com/tutorials/how-to-install-ubuntu-on-your-raspberry-pi#1-overview)

1. Deployment

* The file of the source code is transfer and deploy on the Raspberry pi
* Initialization : “python main.py --real-time 1”
* Deployment was successful, with camera being initiated and captured the real time video of the lane
* Lane-tracking algorithms run correctly. However, compared to the test on PC/laptop, the real-time capture was only made at the speed of less than 10 frame per second, therefore, the display of the real-time capture was not very smooth
* This problem is simply caused by the difference in computational power between a 2GB single-board computer and a 16GB PC. Nevertheless, if the robot move at a very slow speed (in our case, being pushed by a person), then the program can essentially capture lane  and provide accurate measurements of the parameters in questions
* Overall, the deployment of the code was successful, though in the future, refinement may be needed when taking into account of the computational power of a single board computer