Python version - 3.6

Pytorch - 1.7 (any > 1.0 will do)

Folders

1. Case11

This contains the entire code for Case1 - Parking Spots. The three main files to run are as follows -

a. image.py

b. IPM.py

c. testing.py

image.py - It reads image

IPM.py - It takes the image published by image.py and apply IPM on it

testing.py - It takes the image published by IPM.py and then feeds it to VPS Net for processing. The output the is published to topic "VPS"

As we are using ROS with Python3, somethings to note

1. Shebang line would be = #!/usr/bin/env python3 (Note we specify Python3)

2. ROS Dependencies for Python3

sudo apt-get install python3-pip python3-yaml

sudo pip3 install rospkg catkin\_pkg

3. CV\_bridge would not work in Python3, so vision\_openCV is provided. It takes care so that we can use CV\_bridge normally as that in Python2

2. vision\_openCV

This pkg is required for the functioning of CV\_bridge in Python3

To properly use this, please refer to - https://medium.com/@beta\_b0t/how-to-setup-ros-with-python-3-44a69ca36674

Please don’t change anything in this repo

Usage -

1. rosrun case11 image.py
2. rosrun case11 IPM.py
3. rosrun case11 testing.py