ME424 Modern Control and Estimation

Tutorial #4 Install Drake on Your Computer

Drake is the main software toolbox that we use for this class. The <u>Drake website</u> is the main source for information and documentation. To save your time, this tutorial will provide you the method to install Drake. Note that you need to do all the works in your Ubuntu or WSL environment, which we have down in homework #1.

For this course, we just need to take care of the Python version. Use the commands below to download Drake and unzip it.

```
curl -o drake.tar.gz https://drake-packages.csail.mit.edu/drake/nightly/drake-
latest-focal.tar.gz
tar -xvzf drake.tar.gz -C /opt
```

Now we need to install the prerequisites using the platform-specific installation script provided:

sudo /opt/drake/share/drake/setup/install_prereqs

The last step is to add environment variables. Ubuntu users can use "gedit" to finish these step, while WSL users need to use vim. If you forget how to use vim, you can look at the video we provided for you in homework #1 (you can find it on blackboard) or look at this <u>website</u>.

```
vim ~/.bashrc
export PYTHONPATH=/opt/drake/lib/python3.8/site-packages:${PYTHONPATH}
source ~/.bashrc
```

To test if you have successfully install Drake, you can open a terminal and test your installation:

```
python3
import drake.all
```

If there are no errors, you can then play with Drake! You need to try examples provided in Lecture 6. These examples are very helpful for you to finish your project #2.