

# Tensorflow

- description : tensorflow
- author :
- email : hylee@repia.com
- lastupdate : 2020-07-08

## Tensorflow

### Install

Ubuntu 18.04 (GPU version)

1. CUDA Toolkit 10.1 update2

```
https://developer.nvidia.com/cuda-toolkit-archive ( 가 )
```

tip: Tensorflow2 gpu 가

2. cuDNN v7.6.4

```
https://developer.nvidia.com/rdp/cudnn-archive ( 가 )
```

tip: CUDA Toolkit 10.1 update2

3. python3.8

```
https://linuxize.com/post/how-to-install-python-3-8-on-ubuntu-18-04/
```

4. NVIDIA driver

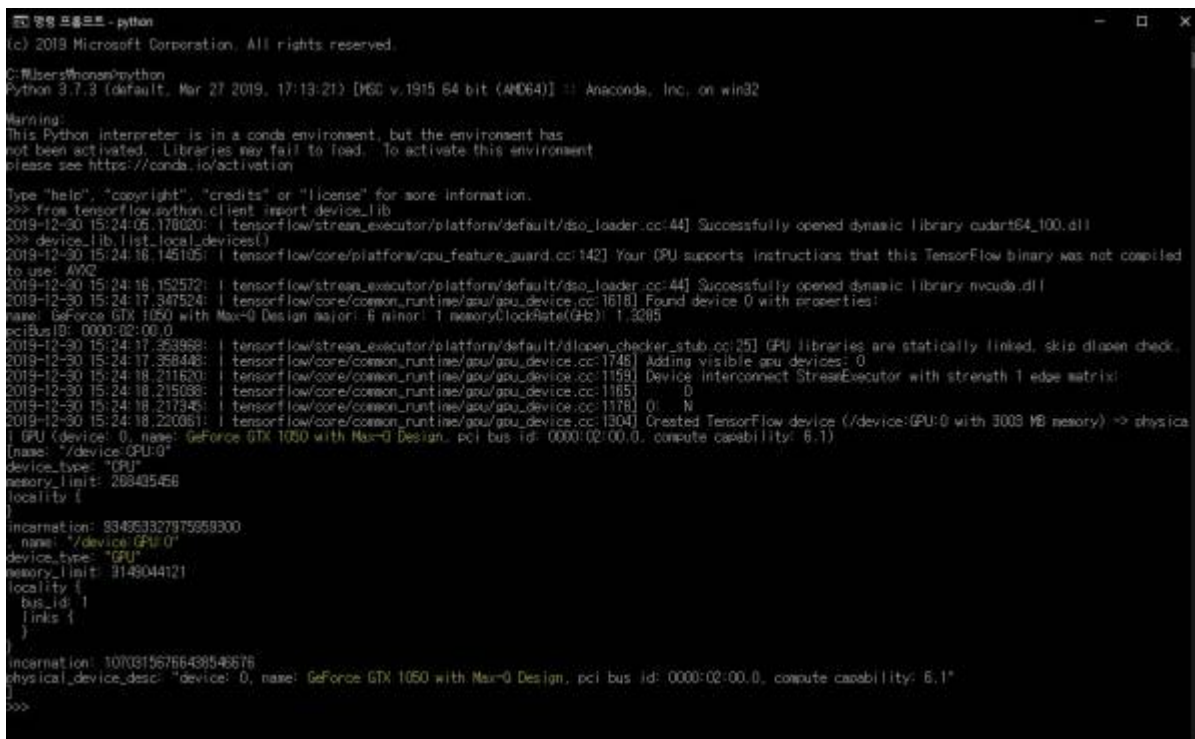
```
$> nvidia-smi  
$> ubuntu-drivers devices  
$> sudo ubuntu-drivers autoinstall
```

<https://linuxconfig.org/how-to-install-the-nvidia-drivers-on-ubuntu-18-04-bionic-beaver-linux>  
NVIDIA

### gpu code

```
from tensorflow.python.client import device_lib
```

## device\_lib.list\_local\_devices()



## Remove

Show

```
$> pip3 show tensorflow
```

Uninstall

```
sudo pip3 uninstall tensorflow-gpu
```

## Upgrade

```
sudo pip3 install --upgrade tensorflow-cpu
```

tensorflow GPU

## Tip

33. TensorFlow 2.0 Release - Tf.Session & Tf.Placeholder , @Tf.Function, Tf\_upgrade\_v2  
 SyntaxError regarding async when attempting to jupyter

```
dhan@dhan-linux:~$ jupyter notebook --ip=0.0.0.0 --port=8888 --allow-root
[I 17:59:50.050 NotebookApp] Writing notebook server cookie secret to
/home/dhan/.local/share/jupyter/runtime/notebook_cookie_secret
Traceback (most recent call last):
  File "/home/dhan/.local/bin/jupyter-notebook", line 8, in <module>
    sys.exit(main())
  File "/home/dhan/.local/lib/python3.8/site-
packages/jupyter_core/application.py", line 270, in launch_instance
    return super(JupyterApp, cls).launch_instance(argv=argv, **kwargs)
  File "/home/dhan/.local/lib/python3.8/site-
packages/traitlets/config/application.py", line 663, in launch_instance
    app.initialize(argv)
  File "<decorator-gen-7>", line 2, in initialize
  File "/home/dhan/.local/lib/python3.8/site-
packages/traitlets/config/application.py", line 87, in catch_config_error
    return method(app, *args, **kwargs)
  File "/home/dhan/.local/lib/python3.8/site-
packages/notebook/notebookapp.py", line 2037, in initialize
    self.init_webapp()
  File "/home/dhan/.local/lib/python3.8/site-
packages/notebook/notebookapp.py", line 1675, in init_webapp
    self.web_app = NotebookWebApplication(
  File "/home/dhan/.local/lib/python3.8/site-
packages/notebook/notebookapp.py", line 183, in __init__
    settings = self.init_settings(
  File "/home/dhan/.local/lib/python3.8/site-
packages/notebook/notebookapp.py", line 302, in init_settings
    nbextensions_path=jupyter_app.nbextensions_path,
  File "/home/dhan/.local/lib/python3.8/site-
packages/notebook/notebookapp.py", line 1292, in nbextensions_path
    from IPython.paths import get_ipython_dir
  File "/home/dhan/.local/lib/python3.8/site-packages/IPython/__init__.py",
line 55, in <module>
    from .core.application import Application
  File "/home/dhan/.local/lib/python3.8/site-
packages/IPython/core/application.py", line 25, in <module>
    from IPython.core import release, crashhandler
  File "/home/dhan/.local/lib/python3.8/site-
packages/IPython/core/crashhandler.py", line 27, in <module>
    from IPython.core import ultratb
  File "/home/dhan/.local/lib/python3.8/site-
packages/IPython/core/ultratb.py", line 116, in <module>
    from IPython.utils import path as util_path
  File "/home/dhan/.local/lib/python3.8/site-
packages/IPython/utils/path.py", line 17, in <module>
    from IPython.utils.process import system
  File "/home/dhan/.local/lib/python3.8/site-
packages/IPython/utils/process.py", line 19, in <module>
    from ._process_posix import system, getoutput, arg_split, check_pid
  File "/home/dhan/.local/lib/python3.8/site-
packages/IPython/utils/_process_posix.py", line 23, in <module>
```

```
import pexpect
File "/usr/lib/python3/dist-packages/pexpect/__init__.py", line 75, in
<module>
    from .pty_spawn import spawn, spawnu
File "/usr/lib/python3/dist-packages/pexpect/pty_spawn.py", line 14, in
<module>
    from .spawnbase import SpawnBase
File "/usr/lib/python3/dist-packages/pexpect/spawnbase.py", line 224
    def expect(self, pattern, timeout=-1, searchwindowsize=-1, async=False):
        ^
SyntaxError: invalid syntax
```

```
$> sudo apt-get remove python-pexpect python3-pexpect
$> sudo pip3 install --upgrade pexpect
```

<https://askubuntu.com/questions/1106943/syntaxerror-regarding-async-when-attempting-to-run-jupyter-in-python-3-7>

ModuleNotFoundError: No module named 'pexpect'

```
dhan@dhan-linux:~$ ipython
.....
.....
ModuleNotFoundError: No module named 'pexpect'
```

```
pip install -I pexpect
python -c 'import pexpect'
```

<https://github.com/facebookresearch/DrQA/issues/9>

## Troubleshooting

## Ref

, [tensorflow](#)

From: <https://rwiki.repia.com/> - . - 2023.12

Permanent link: <https://rwiki.repia.com/doku.php?id=wiki:ai:python:tensorflow> 

Last update: **2023/01/13 18:44**

