

1 系统软件

1.1 source.list

```
deb http://mirrors.163.com/ubuntu/ bionic main restricted universe
multiverse
deb http://mirrors.163.com/ubuntu/ bionic-security main restricted uni-
verse multiverse
deb http://mirrors.163.com/ubuntu/ bionic-updates main restricted uni-
verse multiverse
deb http://mirrors.163.com/ubuntu/ bionic-proposed main restricted
universe multiverse
deb http://mirrors.163.com/ubuntu/ bionic-backports main restricted
universe multiverse
deb-src http://mirrors.163.com/ubuntu/ bionic main restricted uni-
verse multiverse
deb-src http://mirrors.163.com/ubuntu/ bionic-security main restricted
universe multiverse
deb-src http://mirrors.163.com/ubuntu/ bionic-updates main restricted
universe multiverse
deb-src http://mirrors.163.com/ubuntu/ bionic-proposed main restricted
universe multiverse
deb-src http://mirrors.163.com/ubuntu/ bionic-backports main restricted
universe multiverse
deb http://archive.canonical.com/ bionic partner
```

1.2 nvidia 驱动

查看适合的驱动 ubuntu-drivers devices

```
(py37) tryshallow@kernel:~/文档$ ubuntu-drivers devices
== /sys/devices/pci0000:00/0000:00:01:0/0000:01:00.0 ==
modalias : pci:v000010DEd00001382sv000010DEsd00001065bc03sc00i00
vendor    : NVIDIA Corporation
model     : GM107 [GeForce GTX 745]
driver    : nvidia-driver-390 - third-party free
driver    : nvidia-driver-410 - third-party free
driver    : nvidia-driver-435 - third-party free recommended
driver    : nvidia-driver-415 - third-party free
driver    : nvidia-340 - distro non-free
driver    : nvidia-driver-430 - third-party free
driver    : xserver-xorg-video-nouveau - distro free builtin
```

图 1: ubuntu-drivers devices

添加软件仓库

```
sudo add-apt-repository ppa:graphics-drivers/ppa
sudo update
```

禁用 nouveau

```
sudo vim /etc/modprobe.d/blacklist-nouveau.conf
```

在文件末尾插入：

```
blacklist nouveau
options nouveau modeset=0
```

重启, lsmod | grep nouveau 若无输出则禁用成功

```
sudo apt install nvidia-driver-435
```

nvidia-smi 可查看 nvidia 显卡的运行状态

```
(py37) tryshallow@kernel:~/文档$ nvidia-smi
Sun Sep 15 12:19:40 2019

+-----+
| NVIDIA-SMI 435.21      | Driver Version: 435.21    | CUDA Version: 10.1     |
+-----+-----+
| GPU  Name           Persistence-M| Bus-Id        Disp.A | Volatile Uncorr. ECC |
| Fan  Temp   Perf    Pwr:Usage/Cap|      Memory-Usage | GPU-Util  Compute M. |
+-----+-----+
|  0  GeForce GTX 745      Off      | 00000000:01:00.0 Off  |          0%      N/A |
| 20%   45C    P8      N/A /  N/A | 376MiB / 4043MiB |              Default  |
+-----+-----+

+-----+
| Processes:                 GPU Memory |
|   GPU   PID     Type    Process name      Usage   |
+-----+-----+
|    0   1042      G   /usr/lib/xorg/Xorg        207MiB |
|    0   1284      G   /usr/bin/gnome-shell     160MiB |
|    0   24213     G   /usr/lib/firefox/firefox  1MiB   |
|    0   26627     G   gnome-control-center      1MiB   |
+-----+-----+
```

图 2: nvidia-smi

1.3 flashplayer 安装

```
sudo add-apt-repository "deb http://archive.canonical.com/${lsb_release
-sc) partner"
sudo apt update
sudo apt install adobe-flashplugin browser-plugin-freshplayer-pepperflash
```

2 Python

2.1 Anaconda

2.1.1 .condarc

channels:

```
- https://mirrors.tuna.tsinghua.edu.cn/anaconda/cloud/menpo/
- https://mirrors.tuna.tsinghua.edu.cn/anaconda/cloud/bioconda/
- https://mirrors.tuna.tsinghua.edu.cn/anaconda/cloud/msys2/
- https://mirrors.tuna.tsinghua.edu.cn/anaconda/cloud/peterjc123/
- https://mirrors.tuna.tsinghua.edu.cn/anaconda/cloud/pytorch/
- https://mirrors.tuna.tsinghua.edu.cn/anaconda/cloud/conda-forge/
- https://mirrors.tuna.tsinghua.edu.cn/anaconda/pkg/main/
- https://mirrors.tuna.tsinghua.edu.cn/anaconda/pkg/free/
- defaults
  show_channel_urls: true
  auto_activate_base: false
```

2.1.2 pytorch

```
conda install pytorch torchvision cudatoolkit=8.0 -c pytorch
```