

# Install Tensorflow With GPU Support On Debian

1. As root,

```
echo "deb http://ftp.us.debian.org/debian unstable main contrib non-free"
> /etc/apt/sources.list.d/unstable.list
apt-get update
apt-get install gcc-5
sudo update-alternatives --install /usr/bin/gcc gcc /usr/bin/gcc-5 1 #to
set first priority to gcc-5 (credit:
https://gist.github.com/becei/2a2091f282042ed20cda)
```

2. Install Cuda:

```
wget
https://developer.nvidia.com/compute/cuda/8.0/Prod2/local_installers/cuda_
8.0.61_375.26_linux-run
chmod +x cuda_8.0.61_375.26_linux.run # (credit:
https://unix.stackexchange.com/a/359670)
sh ./cuda_8.0.61_375.26_linux.run --tar mxvf
sudo cp InstallUtils.pm /usr/share/perl5/
sudo ./cuda_8.0.61_375.26_linux.run --override # `--override` prevents the
installer from caring too much about the gcc versions)
# Clean up:
rm cuda_8.0.61_375.26_linux.run InstallUtils.pm uninstall_cuda.pl cuda-
installer.pl
rm -r run_files
```

3. Add in your `~/.zshrc`:

```
export LD_LIBRARY_PATH=$LD_LIBRARY_PATH:/usr/local/cuda/lib64/
```

4. Re-login. Install cuDNN v5.1 for Cuda 8.0:

```
libcudnn5-dev_5.1.10-1+cuda8.0_amd64.deb
libcudnn5_5.1.10-1+cuda8.0_amd64.deb
```

5. Create Conda Env:

```
conda create -n tf
source activate tf
pip install --ignore-installed
https://storage.googleapis.com/tensorflow/linux/gpu/tensorflow_gpu-1.2.1-
cp36-cp36m-linux_x86_64.whl
```