

**** This instruction applies to Ubuntu based GPU server. This may not work with servers using different OS. ****

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==== Basic tool ===

```
sudo apt-get update;
sudo apt-get install emacs23 screen python-software-properties;
sudo apt-add-repository ppa:ubuntu-x-swat/x-updates;
```

==== Install drivers (including CUDA)====

```
cd /tmp;
sudo apt-get install freeglut3;
wget http://developer.download.nvidia.com/compute/cuda/5_0/rel-update-
1/installers/cuda_5.0.35_linux_64_ubuntu11.10-1.run;
chmod +x cuda_5.0.35_linux_64_ubuntu11.10-1.run;
sudo./cuda_5.0.35_linux_64_ubuntu11.10-1.run; ### driver will be installed as well
```

==== Install Atlas ===

```
cd /tmp;
sudo apt-get install cpufrequtils g++;
for i in $(seq 0 23); do sudo cpufreq-set -c $i -g performance; done; ### CPU-Throttling off
wget http://www.netlib.org/lapack/lapack-3.4.2.tgz; #downloading lapack
wget http://sourceforge.net/projects/math-atlas/files/Stable/3.10.1/atlas3.10.1.tar.bz2;
####downloading atlas
```

```
bunzip2 -c atlas3.10.1.tar.bz2 | tar -xv;
cd ATLAS; mkdir linux_install; cd linux_install;
../configure -D c -DPentiumCPS=<CPU MHZ> --shared --with-netlib-lapack-
tarfile=/tmp/lapack-3.4.2.tgz
###insert number <CPU MHZ>i.e) 2500
make;
sudo make install;
```

==== InstallTheano ===

```
sudo apt-get install python-numpy python-scipy python-dev python-pip python-nose
libopenblas-devgit;
### installing pre-requisites
sudo pip install Theano;
```