**General dependencies**

sudo apt-get install libprotobuf-dev libleveldb-dev libsnappy-dev libopencv-dev libhdf5-serial-dev protobuf-compiler

sudo apt-get install --no-install-recommends libboost-all-dev

**CUDA**: Install via the NVIDIA package instead of apt-get to be certain of the library and driver versions. Install the library and latest driver separately; the driver bundled with the library is usually out-of-date. This can be skipped for CPU-only installation.

**BLAS**: install ATLAS by sudo apt-get install libatlas-base-dev or install OpenBLAS or MKL for better CPU performance.

**Python** (optional): if you use the default Python you will need to sudo apt-get install thepython-dev package to have the Python headers for building the pycaffe interface.

**Remaining dependencies, 14.04**

Everything is packaged in 14.04.

sudo apt-get install libgflags-dev libgoogle-glog-dev liblmdb-dev

**Remaining dependencies, 12.04**

These dependencies need manual installation in 12.04.

# glog

wget https://google-glog.googlecode.com/files/glog-0.3.3.tar.gz

tar zxvf glog-0.3.3.tar.gz

cd glog-0.3.3

./configure

make && make install

# gflags

wget https://github.com/schuhschuh/gflags/archive/master.zip

unzip master.zip

cd gflags-master

mkdir build && cd build

export CXXFLAGS="-fPIC" && cmake .. && make VERBOSE=1

make && make install

# lmdb

git clone https://github.com/LMDB/lmdb

cd lmdb/libraries/liblmdb

make && make install

Note that glog does not compile with the most recent gflags version (2.1), so before that is resolved you will need to build with glog first.

Continue with [compilation](http://caffe.berkeleyvision.org/installation.html#compilation).