**Caffe Installation Notes**

NOTE: There are a few differences between the official instruction and what is required to get **Caffe** working on **Fedora**.

Prerequisites:

* CUDA
* BLAS (use OpenBLAS for Fedora, not the default ATLAS)

Dependencies:

sudo yum install protobuf-devel leveldb-devel snappy-devel opencv-devel boost-devel hdf5-devel **openblas-devel** gflags-devel glog-devel lmdb-devel

# glog

wget https://storage.googleapis.com/google-code-archive-downloads/v2/code.google.com/google-glog/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

General Dependencies (Generally already installed):

sudo yum update

sudo yum install gcc gcc-c++

sudo yum install git vim python-devel python-pip

**Caffe Install**

* Clone the official repo:

git clone https://github.com/BVLC/caffe

* Install python dependencies

for req in $(cat caffe/python/requirements.txt); do sudo pip install $req; done

* Compilation
  + Setup Makefile

cd caffe

cp Makefile.config.example Makefile.config

subl Makefile.config (or whatever text editor you use)

* + - Enable CUDA compilation by uncommenting **USE\_CUDNN := 1**
    - If OpenCV 3 is used uncomment **OPENCV\_VERSION := 3**
    - Change **BLAS := atlas** to **BLAS := open**
    - Add the openblas include

BLAS\_INCLUDE := /usr/include/openblas

sudo make all

sudo make runtest

References:

<http://caffe.berkeleyvision.org/install_yum.html>

<http://www.aymeric.net/journal/2015/07/tutorial-install-caffe-on-centos-7/>

<https://stackoverflow.com/questions/31253870/caffe-opencv-error>