Keras+Tensorflow installation

Below we organize command line instructions based on computing environment

Ubuntu Users (You might need sudo)

# Step 1: Installing python 3 and virtual environment
$ sudo apt-get install python3-pip python3-dev python-virtualenv

# Step 2: Installing Tensorflow
$ virtualenv –system-site-packages -p python3 ~/tutorial
$ source ~/tutorial/bin/activate
$ pip3 install –upgrade Tensorflow

# Step 3: Installing Keras
$ pip3 install keras

# Testing Keras + Tensorflow:
$ wget https://raw.githubusercontent.com/fchollet/keras/master/examples/mnist_mlp.py
$ python mnist_mlp.py

(For details follow the instructions at
https://www.tensorflow.org/install/install_linux#InstallingVirtualenv)

MAC Users (You might need sudo)

Step 1: Installing Homebrew
$ /usr/bin/ruby -e "$(curl -fsSL
https://raw.githubusercontent.com/Homebrew/install/master/install)"

# Step 2: Installing Python3
$ brew install python3

# Step 3: Installing virtual env
$ pip3 install –upgrade virtualenv

# Step 4: Installing Tensorflow
$ virtualenv –system-site-packages -p python3 ~/tutorial
$ source ~/tutorial/bin/activate
$ pip3 install –upgrade Tensorflow

# Step 5: Installing Keras
$ pip3 install keras

# Step 6: Installing wget
$ brew install wget

# Testing Keras + Tensorflow:
$ wget https://raw.githubusercontent.com/fchollet/keras/master/examples/mnist_mlp.py
$ python mnist_mlp.py

Windows 7 Users

Step 1: Installing 64 bit python 3.5.2 version from
https://www.python.org/downloads/release/python-352/

# Step 2: Installing virtual env
$ pip3 install –upgrade virtualenv

# Step 3: Installing virtualenvwrapper (use default command prompt cmd, not powershell)
$ pip3 install –upgrade virtualenvwrapper-win

# Step 4: Making virtual env
$ mkvirtualenv tutorial

# Step 5: Enabling virtual env
$ workon tutorial

# Step 6: Installing Tensorflow
$ pip3 install –upgrade Tensorflow

Step 7: Installing scipy (without compiling)
Download from: http://www.lfd.uci.edu/~gohlke/pythonlibs/tuft5p8b/scipy-0.19.1-cp35-cp35m-win_amd64.whl to a folder
$ pip3 install path_to_downloaded_whl

# Step 8: Installing Keras
$ pip3 install keras

Step 9: In case you have dll load fail issue download the 64 bit vc++ runtime from
https://www.microsoft.com/en-us/download/details.aspx?id=53587

# Testing Keras + Tensorflow:
$ download the file from:
https://raw.githubusercontent.com/fchollet/keras/master/examples/mnist_mlp.py
$ python mnist_mlp.py