## Install Conda Python with OpenCV and Keras

This will create a conda environment with python 3.7 compatible with opencv3 and keras Mac/Linux: Manually installing packages.

(we recommend using miniconda, but this should also work with the full conda installation.)

## On Mac OS X:

Download Anaconda (https://www.anaconda.com/download/) or Miniconda (https://conda.io/miniconda.html) from the conda web site. You can use the shell script installer (.sh) or the installation package (.pkg)

For Miniconda using bash, open a terminal window and navigate to the directory where conda has been downloaded Miniconda3-latest-MacOSX-x86\_64.sh to and run: \$ bash Miniconda3-latest-MacOSX-x86\_64.sh

For Anaconda using the installer program, double click the Anaconda3-5.0.1-MacOSX-x86\_64.pkg

## **On Linux:**

For Miniconda, open a terminal and navigate to the directory you downloaded Miniconda3-latest-Linux-x86\_64.sh to and run: \$ bash Miniconda3-latest-Linux-x86\_64.sh

For Anaconda, open a terminal and navigate to the directory you downloaded Anaconda3-5.0.1-Linux-x86\_64.sh to and run: \$ bash Anaconda3-5.0.1-Linux-x86\_64.sh

## **On both Mac OS X and Linux:**

 Create and activate a Python 3.7 conda environment called keras. Note that Keras will not currently run on the latest versions of python \$ conda create -n keras python=3.7
 \$ source activate keras

2) Install Numpy (http://www.numpy.org/) version 1.16. It seems that keras will not run properly with the latest numpy \$ conda install numpy=1.16.4

3) Install Matplotlib (https://matplotlib.org/)\$ conda install matplotlib

4) Install Keras from <u>https://keras.io/</u>#This should also install tensorflow\$ conda install keras

5) Install Jupyter Notebook (http://jupyter.org/)\$ conda install jupyter notebook

6) Install IPython (https://ipython.org/)\$ conda install ipython

7) Install OpenCV (https://opencv.org/) from the conda forge.

\$ conda install -c conda-forge opencv

# if the import cv2 does not work with this install, try instead: \$ conda install -c https://conda.anaconda.org/menpo opencv3

8) Optional. You may also wish to install h5py

# Install h5py (http://www.h5py.org/)
\$ conda install h5py