PyMovie installation (MacOS only)

6 August 2019

Outline of installation:

1. If you have a previous Anaconda3 installation that does not include Python 3.7, uninstall it by deleting the folder, otherwise proceed directly to step 3:

C:/Users/<your user name>/anaconda3

2. Install the Python 3.7 version of Anaconda from their website into the folder

C:/Users/<your user name>/anaconda3

This location is the default location (already filled in for you by the Anaconda3 installer). You must accept this default in order for the supplied Desktop icon for starting up PyMovie to work properly (i.e., be able to find PyMovie).

- 3. Install PyMovie from the Internet (requires opening the standard Mac command window and typing source activate to select the correct Anaconda3 environment, then typing pip install pymovie).
- 4. Test the PyMovie installation from the window you opened in step 3. This both confirms that PyMovie is working on your machine and in addition writes an icon to your Desktop that can be double-clicked to start up PyMovie in the future.

Installation: step-by-step in detail

Step 1: Uninstall (only if needed to get a Python 3.7 version) the existing Anaconda installation, otherwise proceed directly to step 3. An uninstall can be done by simply deleting the folder:

C:/Users/<your user name>/anaconda3

Step 2: Install Anaconda from Internet.

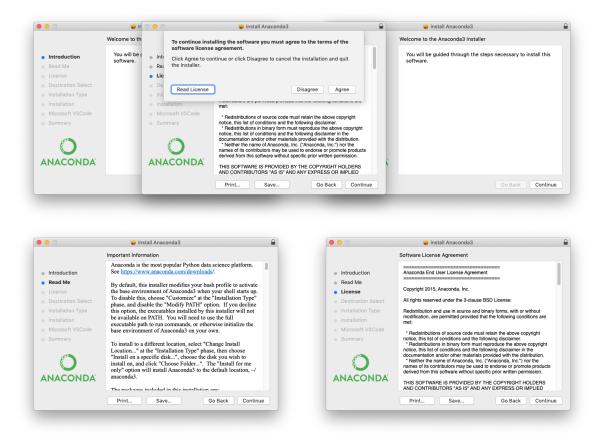
Go to https://www.anaconda.com/download

You will see a page that includes the following (you may have to scroll down to see it):



Click on the Python 3.7 version Download button. I recommend saving the downloaded .pkg file to a place of your choosing rather than choose the 'run' option of the download.

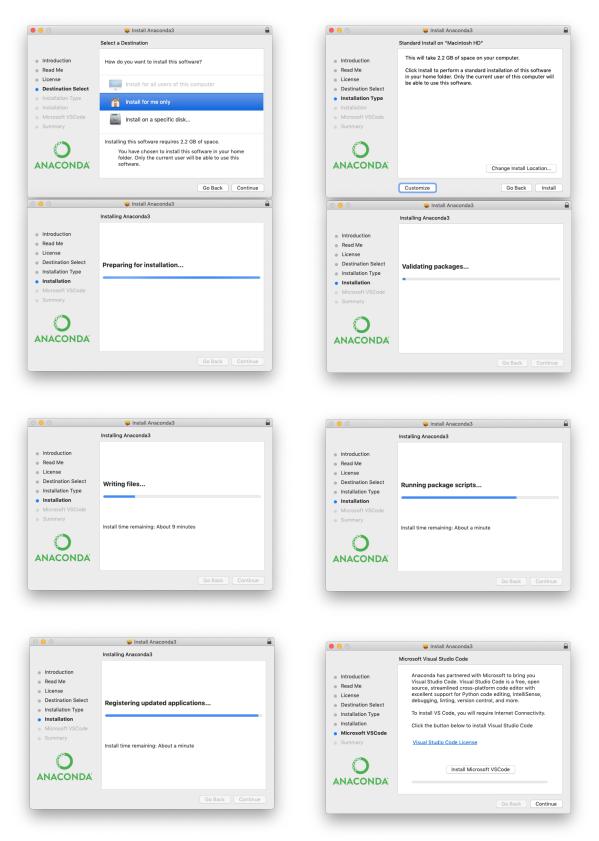
Follow the instructions, accepting all of the defaults and opting out of all 'offers'. Here is a screen-by-tedious-screen 'movie' of my install:



Notice in the left panel above that it explains what happens with the PATH variable and what your other options might be. We'll be accepting the default behavior which modifies your .bash_profile to update your PATH variable appropriately.



The right-hand panel above shows the only 'oddity' of the install. It would look as though an 'install for me only' is selected and an error message says 'you can't do that!'. This is not true. Simply click on the 'install for me only' button and the panel changes to:



In the right-hand panel, you are being offered the opportunity to install VSCode. You don't need this, so don't install it. After clicking continue, the

success screen appears (hopefully) !!



Step 3: Install PyMovie from the Internet (i.e., from the PyPI repository). Open the standard Mac command window.

At the \$ prompt, execute:

source activate

```
Last login: Tue Aug 6 14:04:32 on ttys009

[(base) Roberts-iMac:~ bob$ source activate
(base) Roberts-iMac:~ bob$
```

to activate the correct Anaconda environment. Then change to the anaconda3 directory (this is important so that 'sticky' settings such a window size and position get saved to the proper directory). You should see:

```
anaconda3 — -bash — 80×8

Last login: Tue Aug 6 14:04:32 on ttys009

[(base) Roberts-iMac:~ bob$ source activate

[(base) Roberts-iMac:~ bob$ cd Anaconda3

(base) Roberts-iMac:Anaconda3 bob$
```

After the \$ prompt appears, type **pip install pymovie** as shown below (your screen may differ in the section before the prompt character), then press enter.

There were too many lines in the command window to show them all, so the clip below only shows the final output lines,

```
Requirement already satisfied: python-dateutil>=2.1 in ./lib/python3.7/site-pack ages (from matplotlib!=3.0.0,>=2.0.0->scikit-image>=0.15.0->pymovie) (2.8.0)
Requirement already satisfied: kiwisolver>=1.0.1 in ./lib/python3.7/site-package s (from matplotlib!=3.0.0,>=2.0.0->scikit-image>=0.15.0->pymovie) (1.0.1)
Requirement already satisfied: cycler>=0.10 in ./lib/python3.7/site-packages (from matplotlib!=3.0.0,>=2.0.0->scikit-image>=0.15.0->pymovie) (0.10.0)
Requirement already satisfied: setuptools in ./lib/python3.7/site-packages (from kiwisolver>=1.0.1->matplotlib!=3.0.0,>=2.0.0->scikit-image>=0.15.0->pymovie) (4.0.8.0)
Installing collected packages: pymovie
Successfully installed pymovie-1.9.1 (base) Roberts-iMac:Anaconda3 bob$
```

Note that there may/will be many strange looking messages about requirements already satisfied, but the line:

Successfully installed pymovie-1.9.1

(the exact version number may be different as it reflects the latest available version, which will change with time)

tells us that the PyMovie install worked.

Step 4: Run and Test PyMovie python installation.

Use the already open window.

At the \$ prompt type: python

Now the window will appear similar to this:

```
Requirement already satisfied: cycler>=0.10 in ./lib/python3.7/site-packages (fr om matplotlib!=3.0.0,>=2.0.0->scikit-image>=0.15.0->pymovie) (0.10.0)
Requirement already satisfied: setuptools in ./lib/python3.7/site-packages (from kiwisolver>=1.0.1->matplotlib!=3.0.0,>=2.0.0->scikit-image>=0.15.0->pymovie) (4 0.8.0)
Installing collected packages: pymovie
Successfully installed pymovie-1.9.1
[(base) Roberts-iMac:Anaconda3 bob$ python
Python 3.7.2 (default, Dec 29 2018, 00:00:04)
[Clang 4.0.1 (tags/RELEASE_401/final)] :: Anaconda, Inc. on darwin
Type "help", "copyright", "credits" or "license" for more information.
>>>
```

After you get the >>> prompt type: **from pymovie import main**

You will have to wait a while for this import to complete because python is busy compiling the source code into byte code. The resulting byte code is cached, so this is a one-time only delay.

After you get the >>> prompt back again type: main.main() and before pressing enter, your command window will look like:

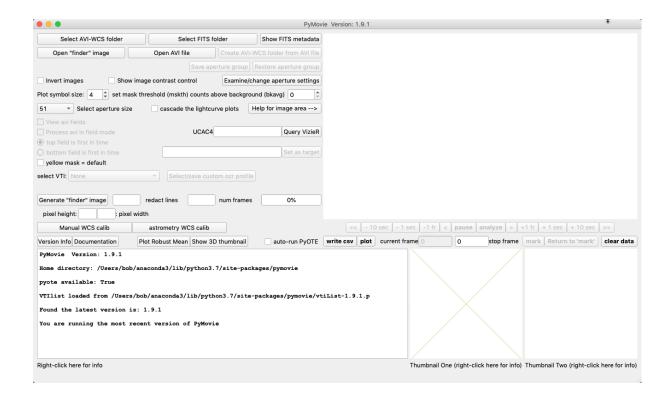
```
om matplotlib!=3.0.0,>=2.0.0->scikit-image>=0.15.0->pymovie) (0.10.0)

Requirement already satisfied: setuptools in ./lib/python3.7/site-packages (from kiwisolver>=1.0.1->matplotlib!=3.0.0,>=2.0.0->scikit-image>=0.15.0->pymovie) (4 0.8.0)

Installing collected packages: pymovie
Successfully installed pymovie-1.9.1
[(base) Roberts-iMac:Anaconda3 bob$ python
Python 3.7.2 (default, Dec 29 2018, 00:00:04)
[Clang 4.0.1 (tags/RELEASE_401/final)] :: Anaconda, Inc. on darwin
Type "help", "copyright", "credits" or "license" for more information.

|>>> main.main()|
```

When you press enter to cause the main.main() command to be executed, the PyMovie application should appear as shown below (the latest version as of this writing is 1.9.1 --- your may see a more recent version appear):



The size and positioning of this first panel will need to be adjusted to your screen size. These settings will be saved in a file named simple-ote.ini in the anaconda3 directory.

Note for future runs of PyMovie: If you are running the latest available version, the text in the PyMovie textOut box at the bottom left of the screen will read:

You are running the most recent version of pymovie

If you don't have the most recent version, prior to PyMovie running, a prompt screen will appear asking you if you want to update to the new version. You can select 'Yes' or 'No'. If you select 'Yes', read the text in PyMovie textOut box at the bottom left of the screen and follow the instruction for restarting PyMovie.

A by-product of running PyMovie is the installation of a clickable icon on the Desktop that will simplify running PyMovie going forward. It looks like this on my Desktop:



Double-clicking that icon will now start up PyMovie.

Congratulations, you have now installed PyMovie.

Helpful information about the purpose of a button can be accessed at any time by rightclicking on a button (or sometimes a label).

There is a button on the left side labelled Documentation. Clicking that button will open a 25 page pdf with comprehensive coverage of the major features of PyMovie.

To the left of the Documentation button is a button labelled Version Info. Anytime you accept a new version install, click this button to see what changes have occurred.