

Instructions - Installation

- **STAND-ALONE INSTALLATION**

M-track can be run using the available stand-alone versions for Linux and Microsoft Windows platforms. Two executable stand-alone versions of M-Track are currently available: v1r1 allows the user to visualize the orientation of the mouse body, v1r2 does not have this feature.

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|----------------------|------------------|----|------------------|
| 1. Linux | M-Track_LIN_v1r1 | or | M-Track_LIN_v1r2 |
| 2. Microsoft Windows | M-Track_WIN_v1r1 | or | M-Track_WIN_v1r2 |

- **INSTALLATION FROM SOURCE CODE**

M-Track can be run from source code by executing MTrack_Qt.py using Python 2.7. The following is a list of the required libraries and packages.

Required Libraries

1. Python 2.7
2. OpenCV 3.0
3. PyQt 4.8
4. Numpy 1.10.4

We recommend to install these libraries from the Anaconda open data science platform (<https://www.continuum.io/downloads>)

Required packages

- | | |
|--------------------|----------------------------------|
| 1. MTrack_Qt.py | % main function, GUI |
| 2. MTrack.py | % include tracking functionality |
| 3. ColorLabel.py | % display color selector image |
| 4. DisplayLabel.py | % display and cage drawing |
| 5. InfoDialog.py | % display info messages |
| 6. ROILabel.py | % display and ROI drawing |

Linux

1. Install Anaconda
(see <https://docs.continuum.io/anaconda/install>)
bash ~/Downloads/Anaconda2-4.0.0-MacOSX-x86_64.sh
2. Install PyQt and Numpy
conda install pyqt
conda install numpy
3. Install OpenCV 3.0
(see <http://rodrigoberriel.com/2014/10/installing-opencv-3-0-0-on-ubuntu-14-04/>)
conda install -c trax opencv3=3.0.0

Mac OS X

1. Install Anaconda
(see <https://www.continuum.io/downloads>)

2. Install PyQt and Numpy

```
conda install pyqt  
conda install numpy
```

3. Install OpenCV 3.0

```
brew install opencv3.0  
echo /usr/local/opt/opencv3/lib/python2.7/site-packages >>  
/Users/Yourpath/anaconda/lib/python2.7/site-packages/opencv3.pth
```

Microsoft Windows

1. Install OpenCV 3.0 from <http://opencv.org/downloads.html>
copy C:\opencv3\build\python\2.7\x64\cv2.pyd c:\Anaconda\Lib\site-packages\
2. Copy the opencv_ffmpeg300_64.dll file from C:\Applications\opencv\build\x64\vc10\bin into the python path (mine is at C:\Users\lin\Anaconda)
3. Install PyQt and Numpy from the command window
conda install pyqt
conda install numpy

Support

If you experience any problem, please contact Annalisa Scimemi (scimemia@gmail.com;
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