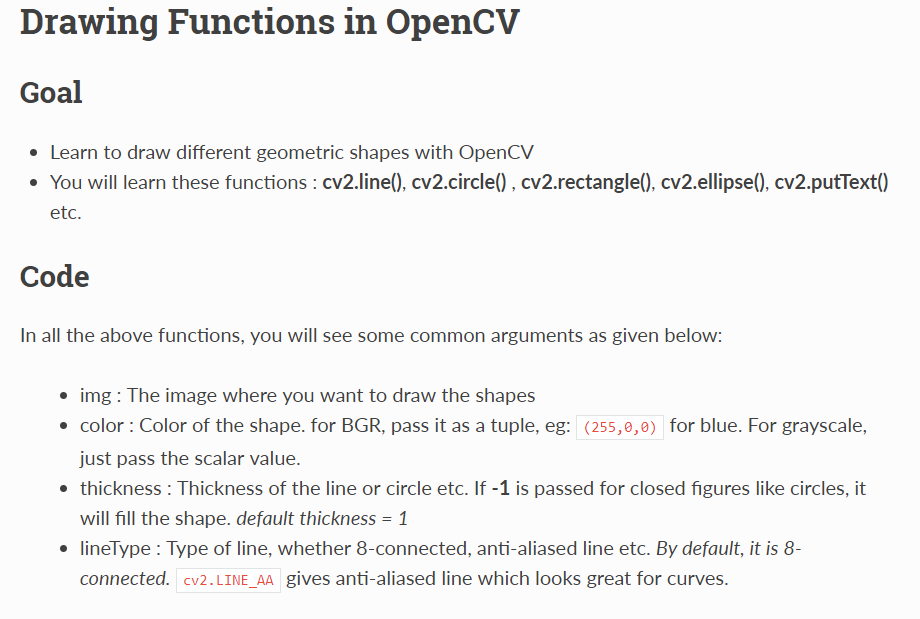
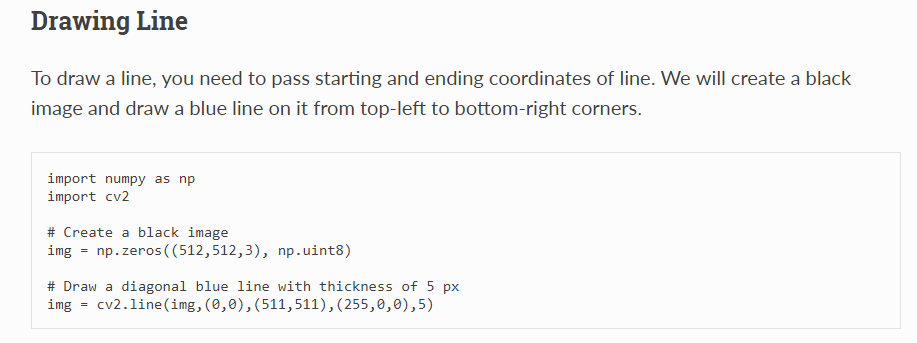
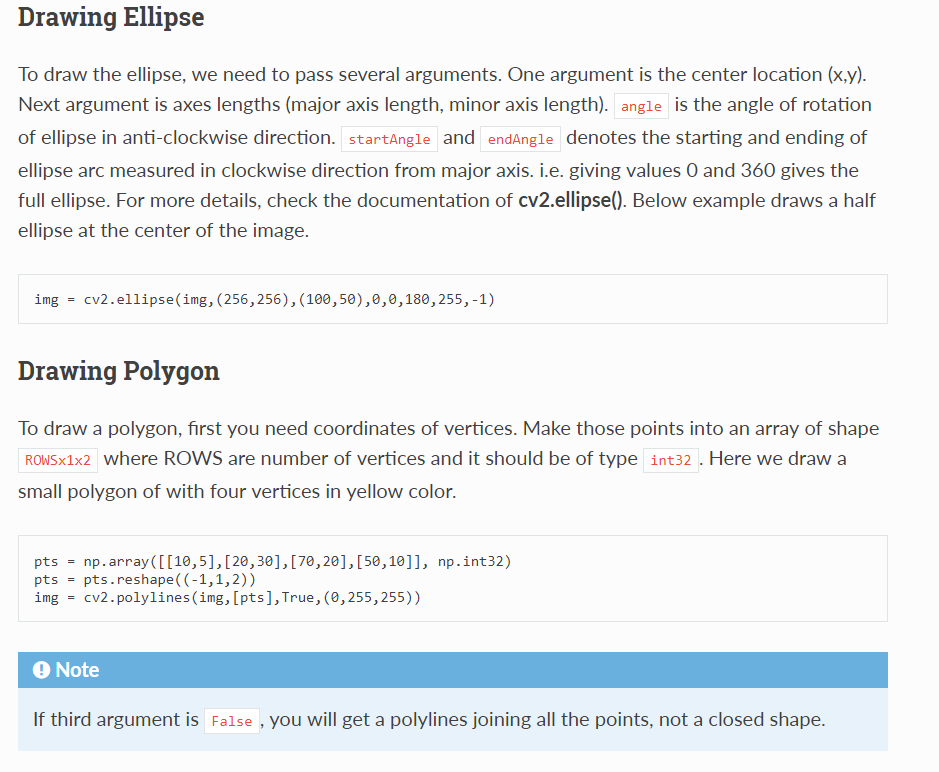
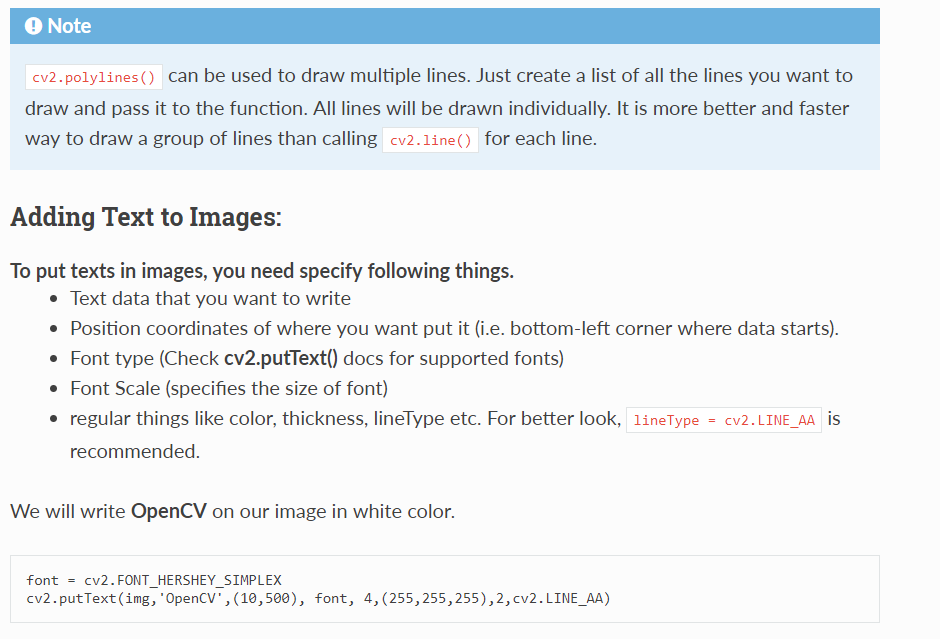


Drawing lines on images using opencv





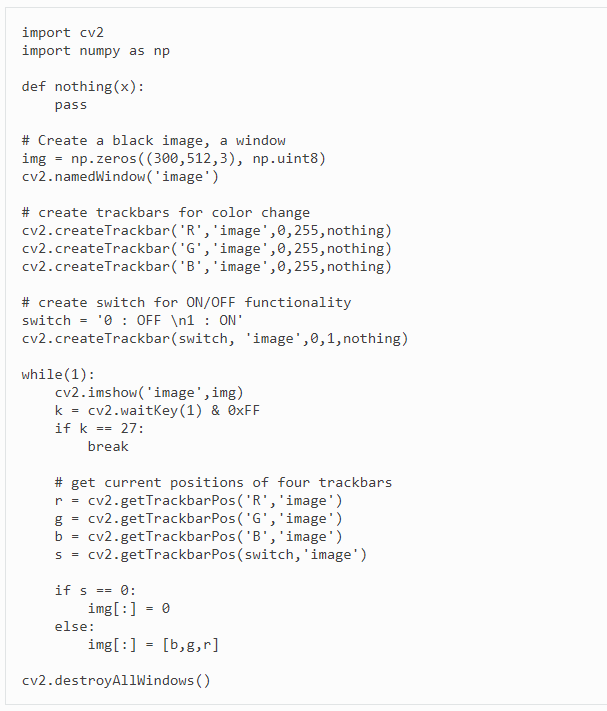


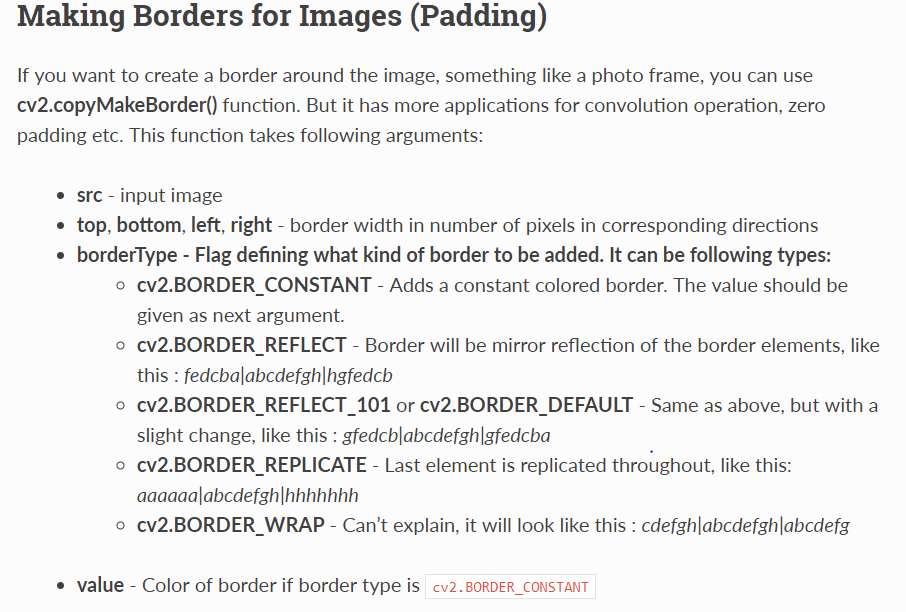


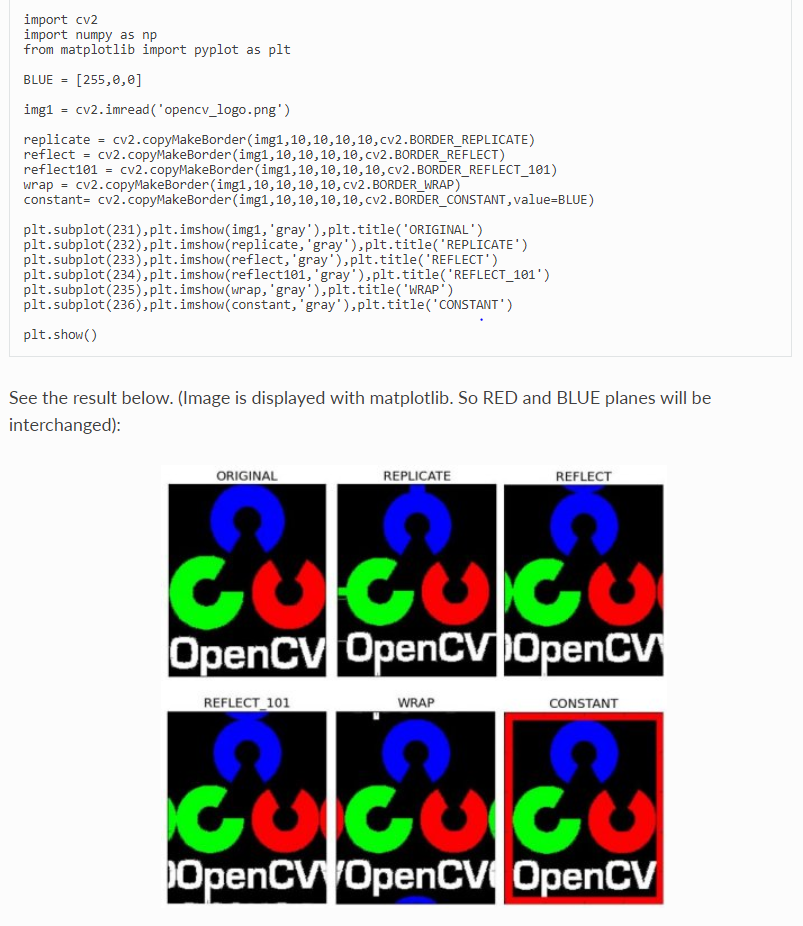
<https://opencv-python-tutroals.readthedocs.io/en/latest/py_tutorials/py_gui/py_drawing_functions/py_drawing_functions.html>

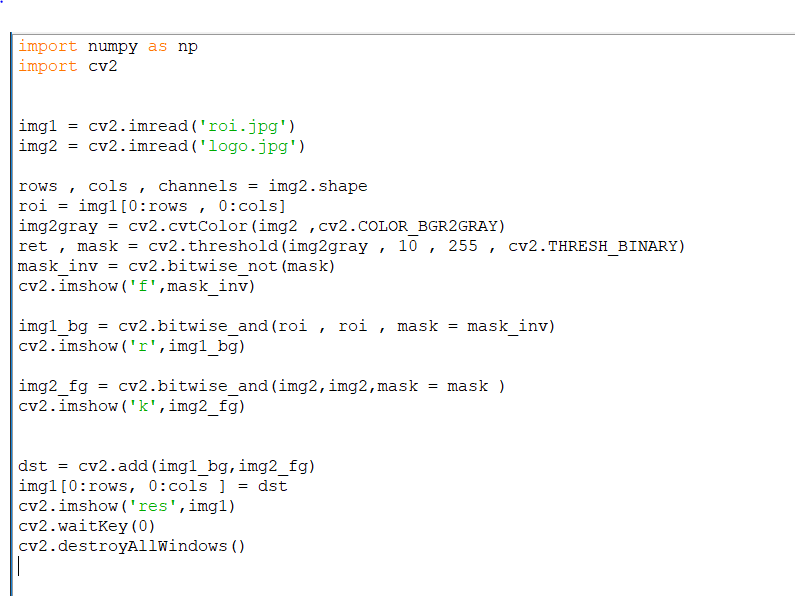
follow the docs in the above link

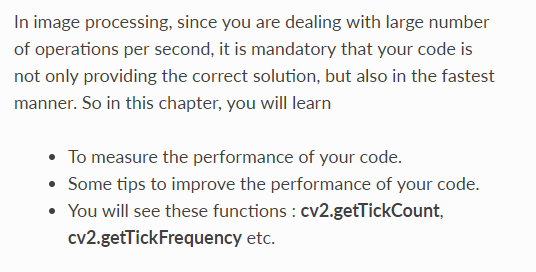
Taskbar for colour

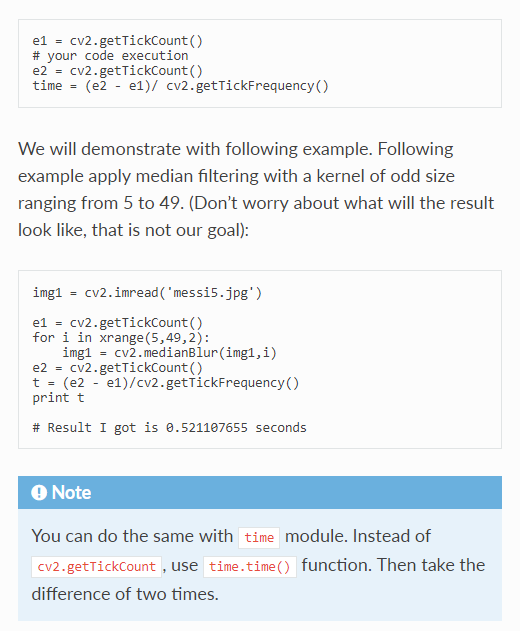


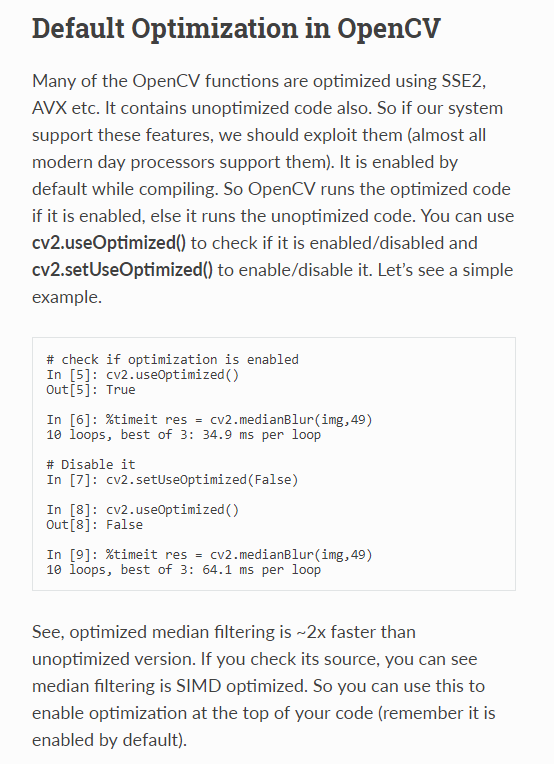


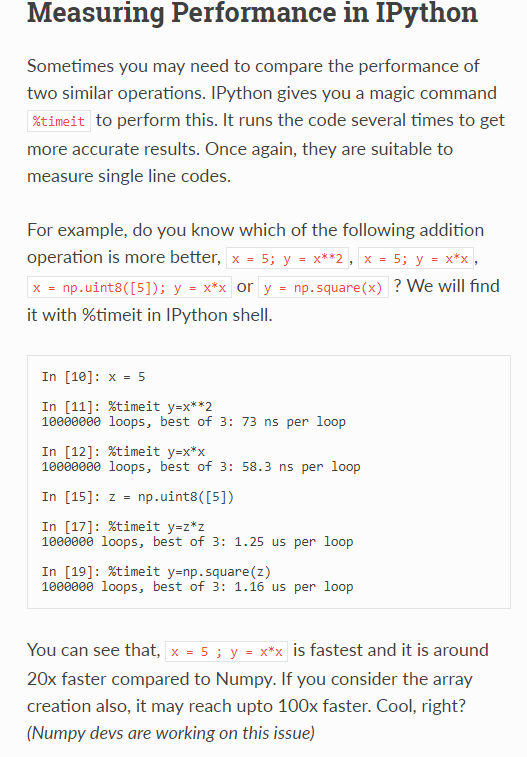


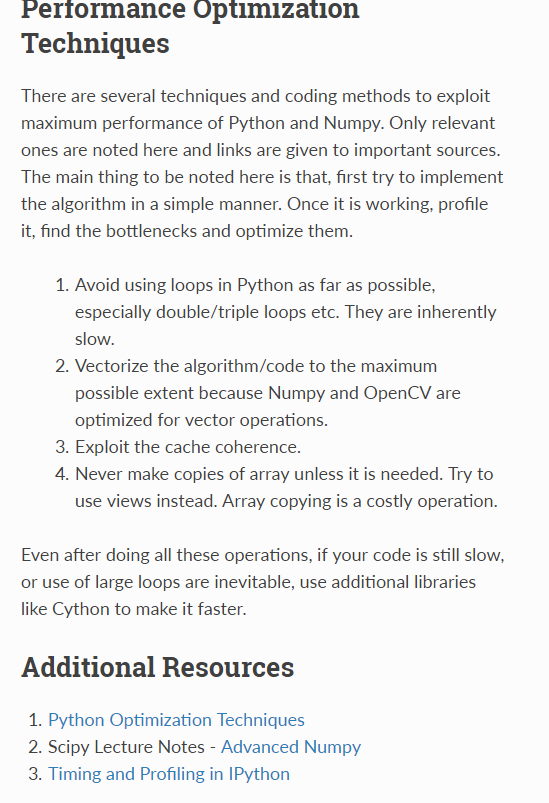








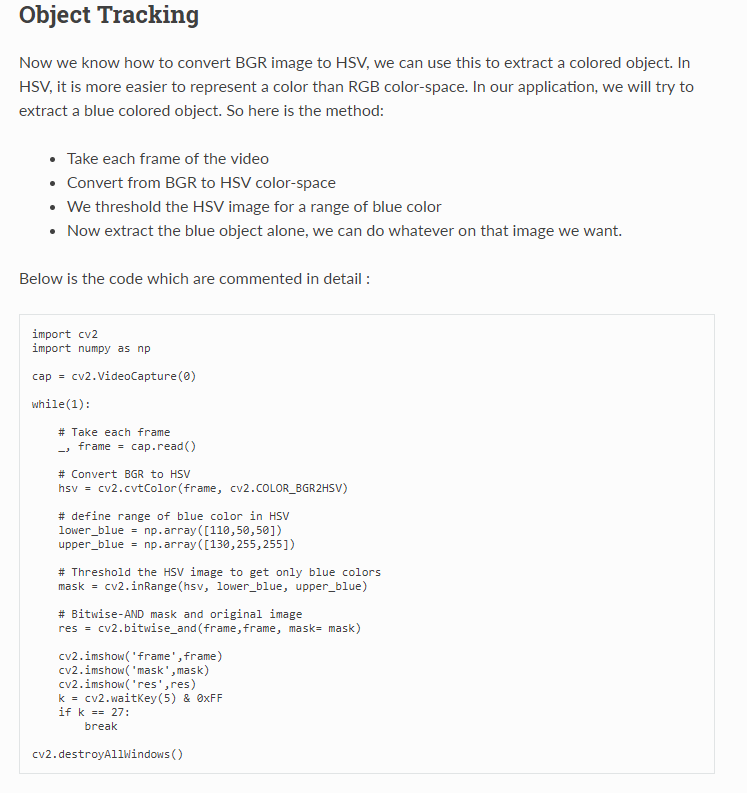


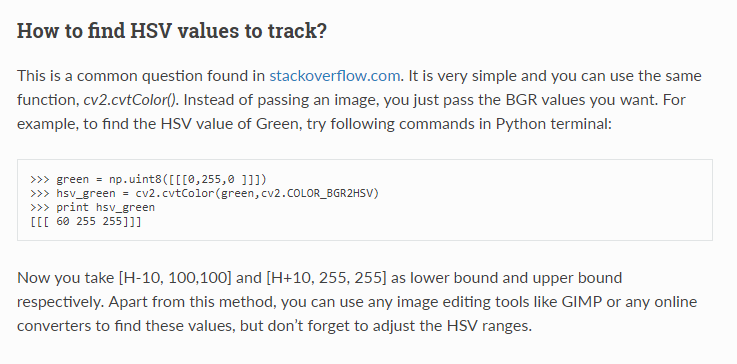


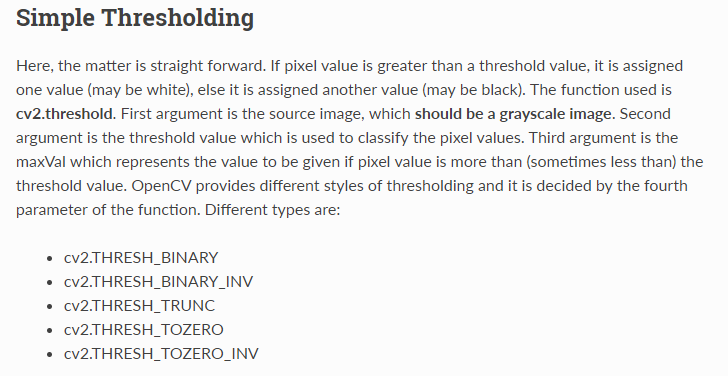
<http://wiki.python.org/moin/PythonSpeed/PerformanceTips>

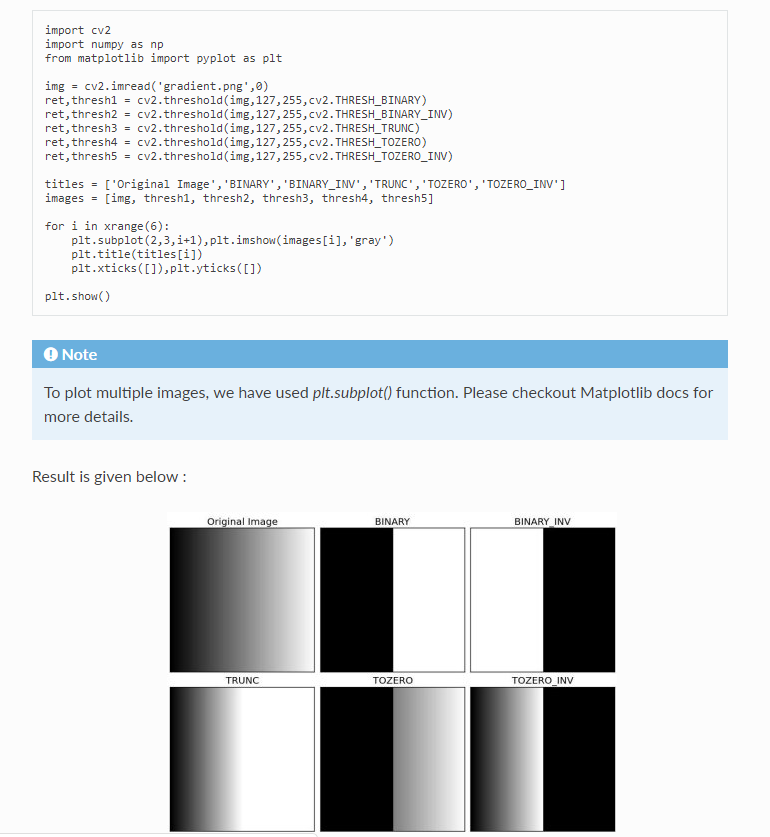
<http://scipy-lectures.github.io/advanced/advanced_numpy/index.html#advanced-numpy>

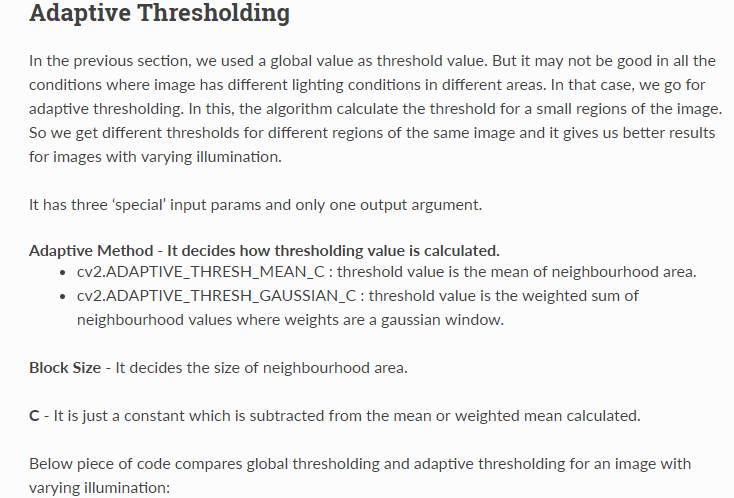
<http://pynash.org/2013/03/06/timing-and-profiling.html>

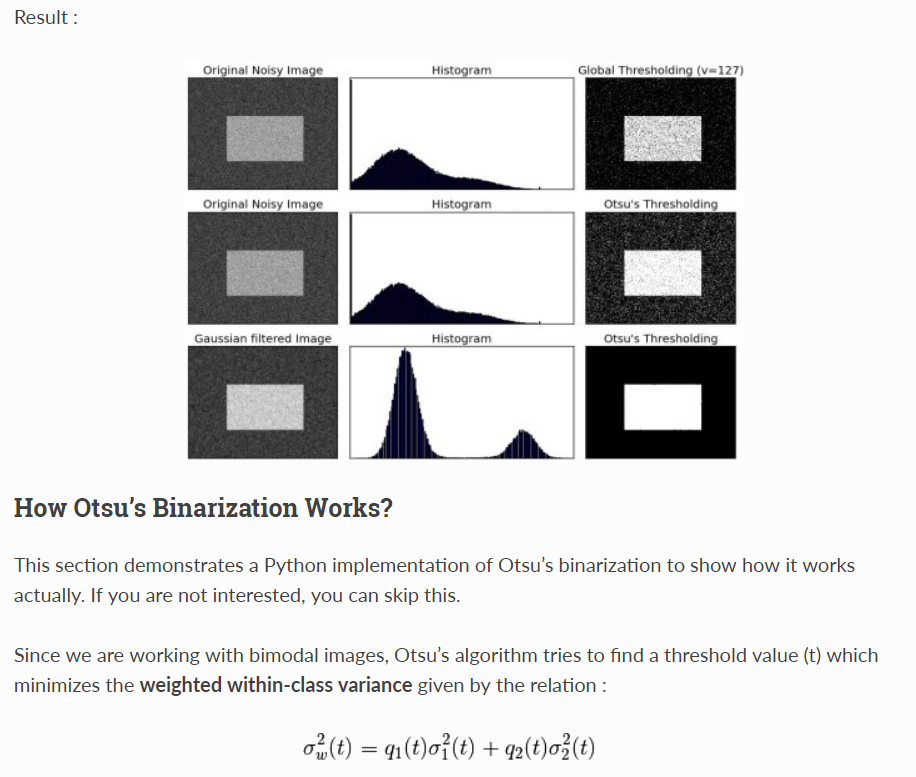
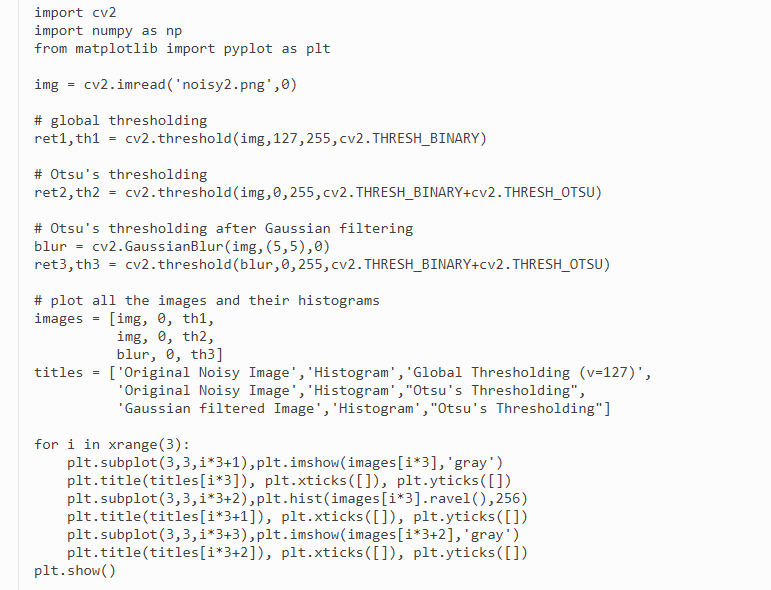
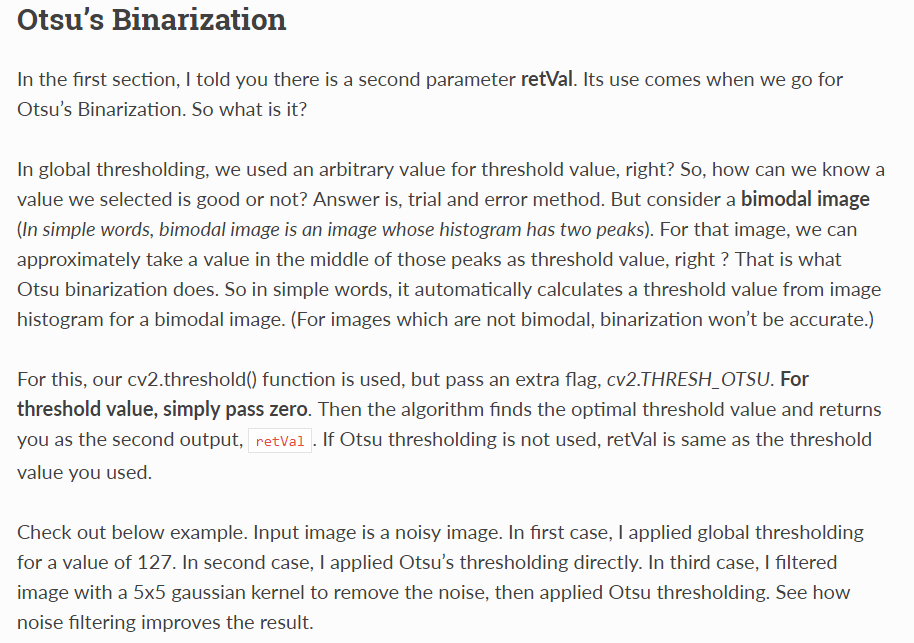
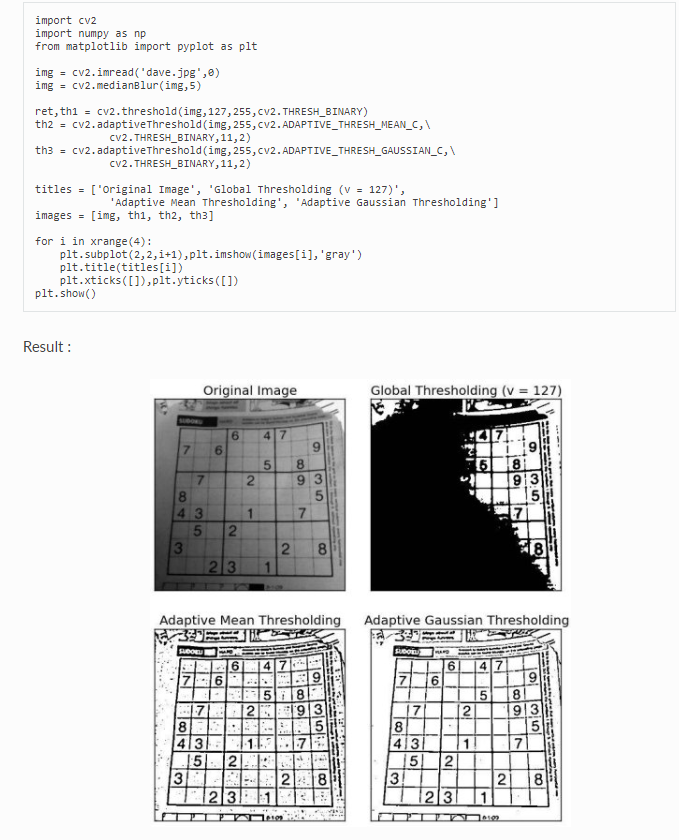


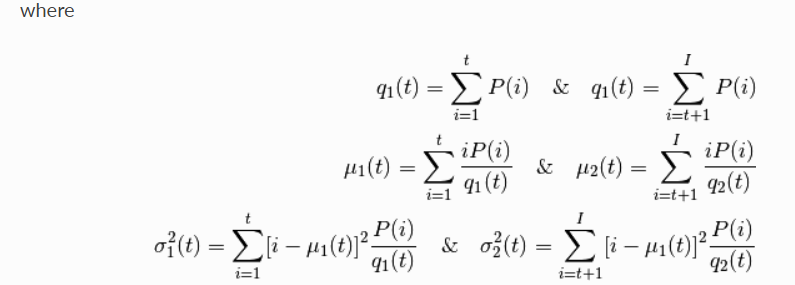


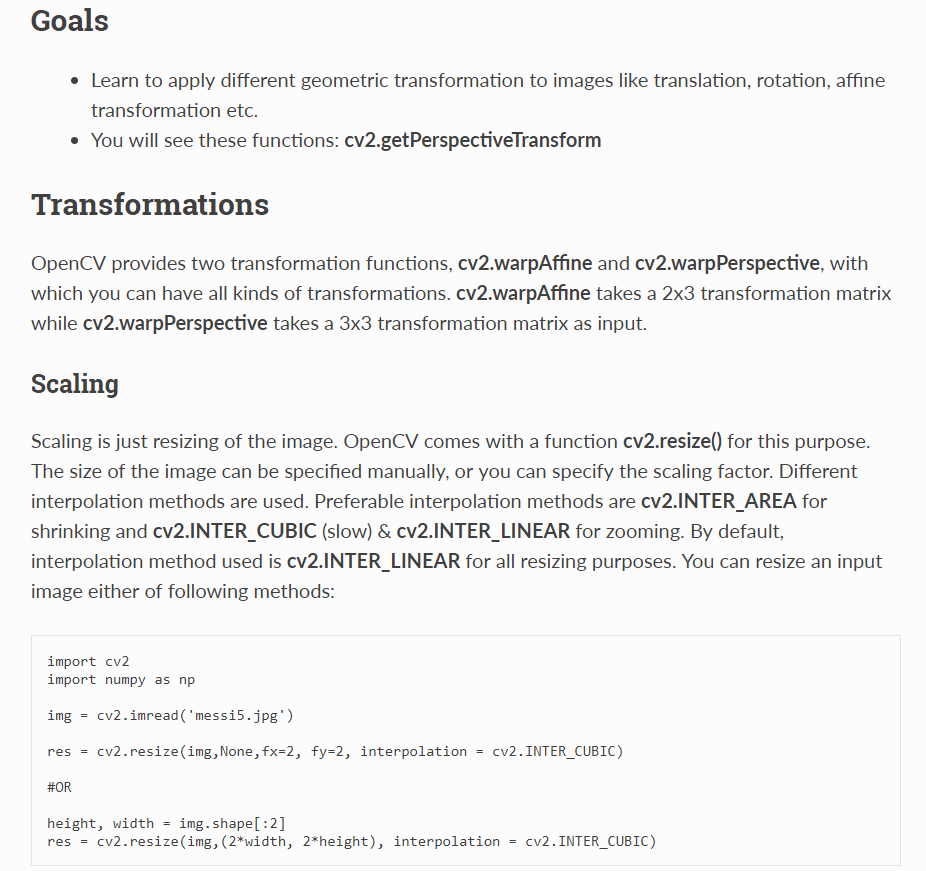
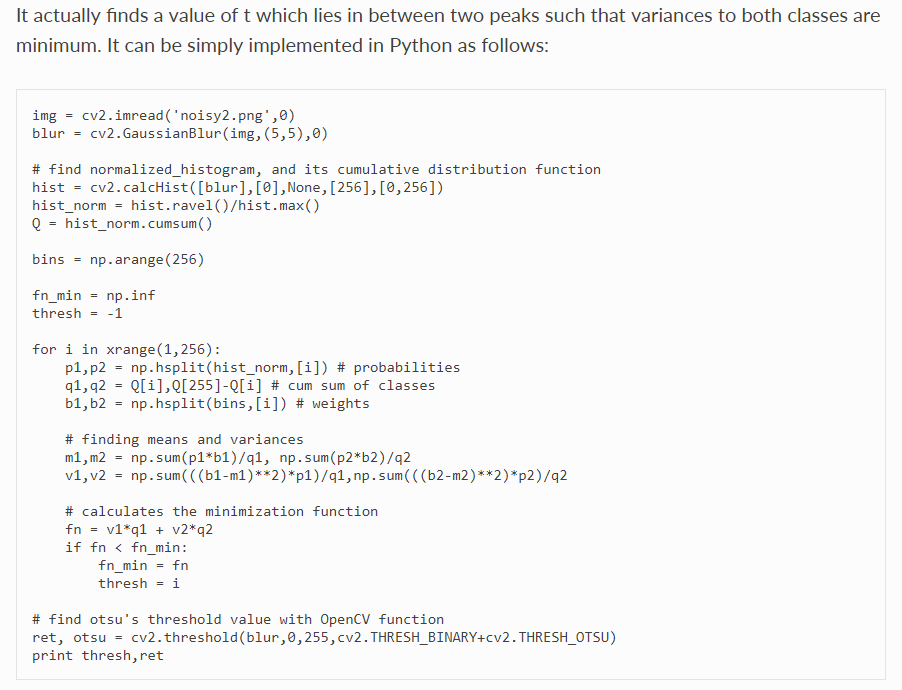












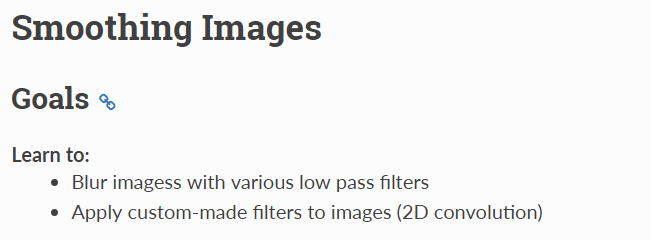
Translation

Rotation

Affine Transformation

Perspective Transformation

Check out the docs

SMOOTHING IMAGES   


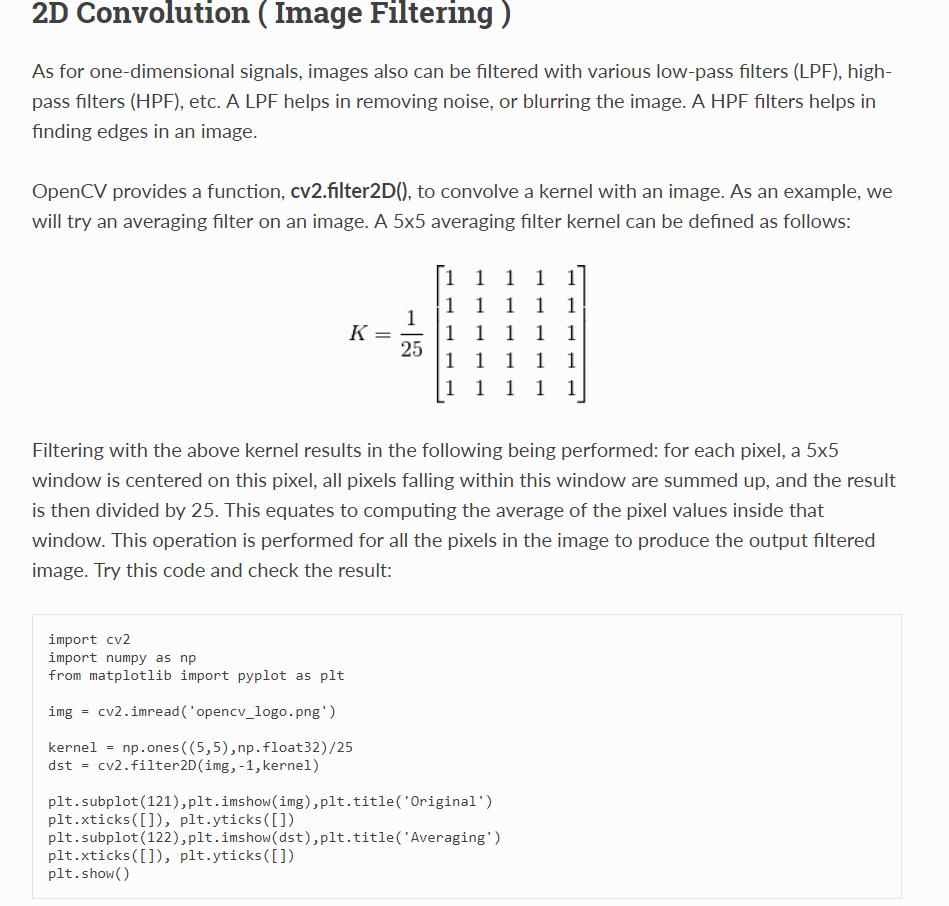
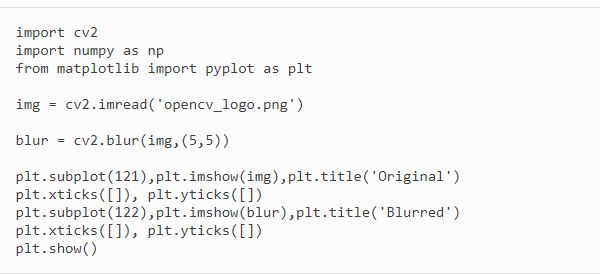
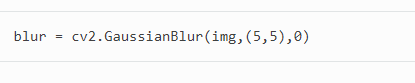


Image blurring

1. Averaging - blur and boxFilter
2. Gaussian Filtering – cv2.GaussianBlur() and to create a Gaussian kernel cv2.getGaussianKernel()
3. Median Filtering - add 50% noise to our original image and use median filter 
4. Bilateral Filter – to preserve the edges in the image 