I have used the following techniques/algorithms:

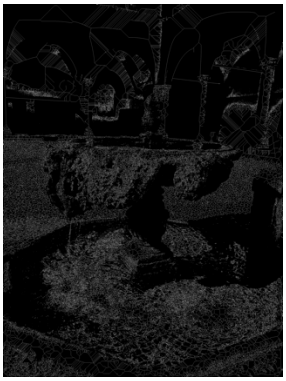
- filter/gaussian with a sigma value of 5

- convert to 8-bit image and change the colour scale by changing the lookup table

I used lookup table / rainbow RGB

- Adjust/auto threshold selecting the Otsu method (on the 8-bit image)

- Process/binary selecting the skeletonize on the thresholded image



- On the original colour image: Process/filters selecting the maximum filter

 Maximum filter of size 5x5 pixels

- On the original colour image: Process/filters selecting the minimum filter

 Minimum filter of size 5x5 pixels

Now import the original image into Python.

```
import matplotlib.pyplot as plt
import numpy as np
#reading image
```

```
filename = '../Images/Rome/Rome.jpg'

from skimage import io

rome= io.imread(filename)

# display image

plt.figure()

plt.imshow(rome)
```

- Apply a gaussian filter with sigma=5

```
#gaussian filter

from skimage import filters

from skimage.filters import gaussian

gaussrome= gaussian(rome sigma=5)


plt.figure()

plt.imshow(gaussrome)

plt.show()
```

- Apply an Otsu thresholded image by using the otsu function

```
#mean of 3 RGB bilder
imagemean = rome.mean(axis=2)
from skimage.filters import threshold_otsu
thresh = threshold_otsu(imagemean)
binary = imagemean > thresh
plt.figure()
plt.imshow(binary, 'gray')
plt.show()
```