## ex8

## May 8, 2019

1 Exercise 8. You are given a set of 4 images: tp1 101.png - tp1 104.png. For one of these images perform the segmentation of the text information. See the example in Figure 3. Some graphical elements can be segmented as well.

```
[]: #TODO https://scikit-image.org/docs/dev/auto_examples/edges/plot_edge_filter.html
import numpy as np
import matplotlib.pyplot as plt
from skimage.filters import gaussian, frangi
image = cv2.imread("./data/tp1_101.png")
image.shape
edge_gaussian = gaussian(image)
edge_frangi = frangi(image, gamma=50)
fig, ax = plt.subplots(ncols=3, sharex=True, sharey=True,
                        figsize=(8, 4))
ax[0].imshow(image)
ax[0].set_title('original image ')
ax[1].imshow(edge_gaussian)
ax[1].set_title('Gaussian Edge Detection')
ax[2].imshow(edge_frangi)
ax[2].set_title('frangi Edge Detection')
for a in ax:
    a.axis('off')
plt.tight_layout()
plt.show()
```