Université de Bourgogne

Image Processing

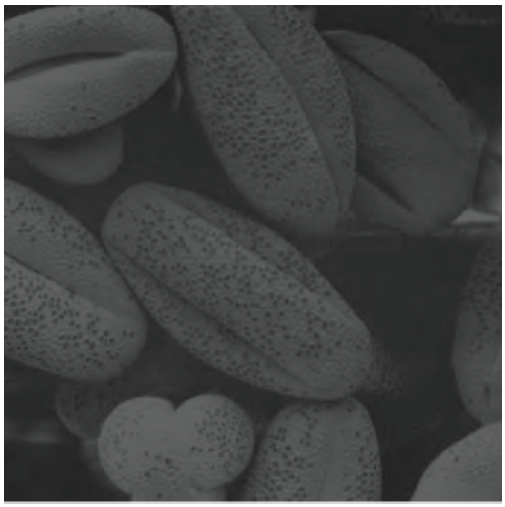
Deadline : 02/04/2020 23h59

Instructions to the candidates:

1 Read and write an image

Goal read and write images with Matlab

Load the image "seeds"



Save it as .jpg image

Give the characteristics of this image.

Join a copy of your Matlab code.

2 Gray level transformation

Goal: introduction to histograms.

Give the histogram of that image

Apply gray level transformation on the previous image in order to binarize it and then to obtain a negative of the image.

Conclusion

Join a copy of your Matlab code.

3 Histogram

Goal: histogram as information tool

Compare the histograms of the original image and the negative of the image.

Result.

Conclusion.

Join a copy of your Matlab code.

4 Histogram equalization

Goal: histogram as visualization tool

Remind the objective of the histogram equalization algorithm.

Apply the equalization algorithm of the original image and then on the negative image.

Conclusions.

Join a copy of your Matlab code.

5 Binarization of an image

Goal: preparation before segmentation of an image

Remind the objective of binarization.

Process the binarization of the original image and of equalized one.

Join a copy of your Matlab code.