

LW IP n°2: filtering

Deadline 09/04/2020 23:59

1 Contour detection

Goal test algorithm on the moon image 'galaxy.tif'

Test on that image the following algorithms: Robert gradient, sobel, gradient, Laplacian

Join a copy of your Matlab code.

2 Filtering

Goal: remove noise from an image

load the image "galaxy"

Add a gaussian white noise on the image and then use a spatial low-pass filter to eliminate the artefacts. Give the measure of the PSNR of the image with noise and of the filtered image.

Then on the original image use a spatial high-pass filter on the original image to enhanced the transitions.

Join a copy of your Matlab code.

3 Application

Enhance the contrast on the image "body bone scan"

Join a copy of your Matlab code.