Name: VEN THON

ID: e20191250

Group: I5-GIC-C

Assignment Discussion 12

1) What is convolution?

   Convolution is a mathematical operation on two functions (f and g); it produces a third function giving the integral of the pointwise multiplication of the two functions as a function of the amount that one of the original functions is translated.

2) What is a mask or kernel?

   They refer to a small matrix of numbers used to modify an image by applying a mathematical operation called convolution. This operation allows you to achieve various effects on the image, such as blurring, sharpening, edge detection, and embossing.

3) Why do we need to do smoothing?

   We need to do smoothing because, in order to eliminate these high frequencies (noises).

4) What is thresholding?

   Thresholding is the simplest method of image segmentation. From a grayscale image, thresholding can be used to create binary images.

5) What is difference between low and high threshold?

   - low threshold: all edges are detected but we have false positives.
   - high threshold: all the pixels detected are edge pixels but we are missing some of them (false negatives).