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**Section B, question E**

Sigma weight how much weight we are going to give the local environment

around each pixel when convolving the gaussian mask with the original

image

H\_th - It the maximum size of a gradient that will allow to stay at the

image. When it is too high subtle changes will not enter the output. Too

low, and too many false positive will enter the output and we might not

understand what it is that we are seeing.

L\_th is the secondary maximum size, it will help connects pixels in

between high-gradient pixels. When too high subtle changes will not enter

the output, and the output edges will seem cut in the middle. When too

low to many false positive will go into the output.

**Section C, question F**

P measurement punish false positives because |E| is in the denominator. We need to have as few false positives as possible, but also we need to keep positive false to the fewest as well because of the intersection in the numerator. This requires probably a a subtle balance between the parameters

R will be high if we will have as many possible of matching value. We don't care about false positives, we are not punished for them. Thus we would like sigma to be low in case we don’t care about noises, and we want H\_th, and L\_th to be low as well because we don't mind false positives. I think just running with low parameters value will yield a high performance for R

F gives us the balance between two measurements that can be very different and in some way may be independent of each other

**Section C, question I.**

The result do not remain the same. The R results are much better than in

the naive version. The results in the naive version that were good remained good with the

imdilate, but there are new results that weren't so good in the naive version that are very good now. This has a pretty simple explanation. Some areas in the image that should have had a match in the naive evaluation, did not have match because of digitization. For example mshow(canny("Images/Church.jpg",5,4,3), []); did not receive a high result in the naive, but did receive high result in the evaluate.

**Section D, question K**

Soble will fail in images with a lot of noise since it does not have the

smoothing stage that canny has.

In addition, the edges will be thick with comparison to canny, we we inspire

an accurate description of the edges**.**

**Section D, question M**

Generally Canny yields higher results, but it require more time for tuning per image.

Also we will need different parameters to yield high results per image. Sobel is much more plug and play.