

Homework 10

Zero Crossing Edge Detection

- You are to implement 2 Laplacian Mask, Minimum Variance Laplacian, Laplacian of Gaussian, and Difference of Gaussian(inhibitory sigma=1, excitatory sigma=3, kernel size 11x11 [1][1])
- Please list the kernels and the thresholds (for zero crossing) you used.
- You may generate the Difference of Gaussian kernel in anyway you like. This formula is actually Gaussian(0,1) - Gaussian(0,3).

– Threshold Values listed below are for reference:

(僅供參考，同學可自己找出 Edge Image 品質最佳的門檻值 threshold value)

Laplace Mask1 (0, 1, 0, 1, -4, 1, 0, 1, 0): 15

Laplace Mask2 (1, 1, 1, 1, -8, 1, 1, 1, 1)

Minimum variance Laplacian: 20

Laplace of Gaussian: 3000

Difference of Gaussian: 1

- Due date: 2018/12/11 2:20pm