Computer Vision HW10

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1.Implement 2 Laplacian Mask, Minimum Variance Laplacian, Laplacian of Gaussian, and Difference of Gaussian(inhibitory sigma=3, excitatory sigma=1, kernel size 11x11:

(a) Laplace Mask1 (0, 1, 0, 1, −4, 1, 0, 1, 0): 15

(b) Laplace Mask2 (1, 1, 1, 1, −8, 1, 1, 1, 1)

(c) Minimum variance Laplacian: 20

(d) Laplace of Gaussian: 3000

(e) Difference of Gaussian: 1

Results.

(1). Image

(a) Laplace Mask1 (0, 1, 0, 1, −4, 1, 0, 1, 0): 15

Figure 1: LaplaceMask1.

(b) Laplace Mask2 (1, 1, 1, 1, −8, 1, 1, 1, 1)

Figure 2: LaplaceMask2.

(c) Minimum variance Laplacian: 20

Figure 3: MinimumVarianceLaplace.

(d) Laplace of Gaussian: 3000

Figure 4: LaplaceOfGaussian.

(e) Difference of Gaussian: 1

Figure 5: DifferenceOfGaussian.