

# Report for Q1

October 18, 2020

## 1 Observation

For Figure 1, the optimal parameters for harris corner detection are:

- Standard Deviation for Gaussian blurring the image before computing gradients,  $\sigma = 2.0$
- Standard Deviation for Gaussian Weighted Average used in computation of structure tensor,  $s = 0.45$
- The constant  $k$  in the corner-ness measure calculation,  $k = 0.12$



Figure 1: Original Image

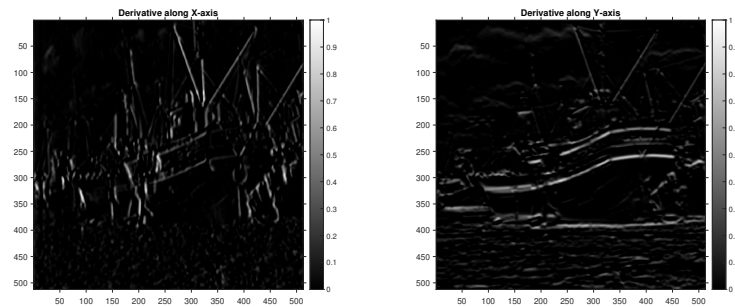


Figure 2: Derivative Images

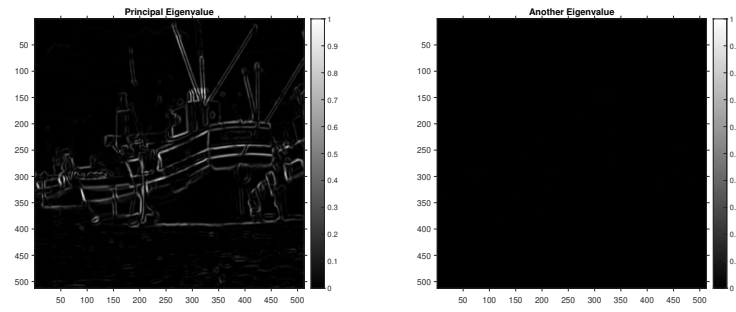


Figure 3: Eigenvalue Images

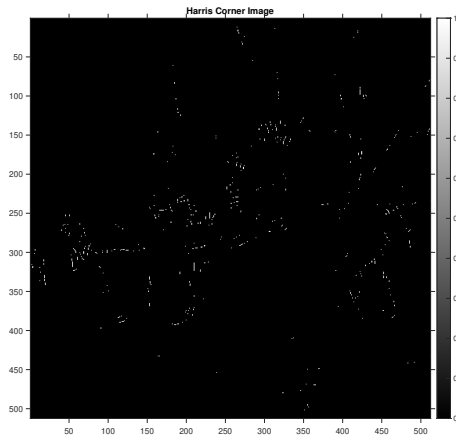


Figure 4: Harris Corner Mask

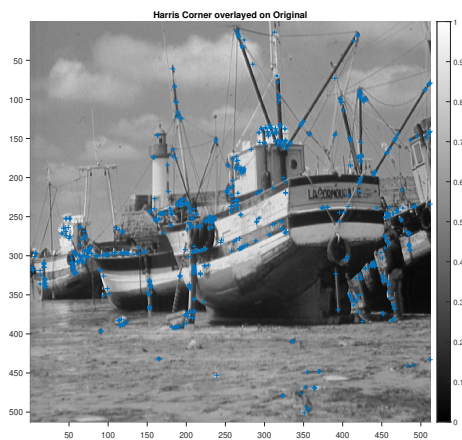


Figure 5: Harris Corner overlayed on Original Image