

Computer Vision HW9

R12922054 資工所 邱信璋

1. You are to implement following edge detectors with thresholds ::

- (a) Robert's Operator: 12**
- (b) Prewitt's Edge Detector: 24**
- (c) Sobel's Edge Detector: 38**
- (d) Frei and Chen's Gradient Operator: 30**
- (e) Kirsch's Compass Operator: 135**
- (f) Robinson's Compass Operator: 43**
- (g) Nevatia-Babu 5x5 Operator: 12500.**

Results.

(1). Image

(a) Robert's Operator: 12



Figure 1: Roberts_img.

(b) Prewitt's Edge Detector: 24



Figure 2: Prewitt_edge_detector_img.

(c) Sobel's Edge Detector: 38



Figure 3: Sobel_edge_detector_img.

(d) Frei and Chen's Gradient Operator: 30



Figure 4: Frei_and_Cheng_gradient_img.

(e) Kirsch's Compass Operator: 135



Figure 5: Kirsch_compass_img.

(f) Robinson's Compass Operator: 43



Figure 6: Robinson_compass_img.

(g) Nevatia-Babu 5x5 Operator: 12500



Figure 7: Nevatia_Babu_img.