

Homework 9

General Edge Detection

- You are to implement Robert, Prewitt, Sobel, Frei & Chen, Kirsch, Robinson, and Nevatia-Babu's edge detectors.
- 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)
 - Robert's Operator: 12
 - Prewitt's Edge Detector: 24
 - Sobel's Edge Detector: 38
 - Frei and Chen's Gradient Operator: 30
 - Kirsch's Compass Operator: 135
 - Robinson's Compass Operator: 43
 - Nevatia-Babu 5x5 Operator: 12500
- Due date: **2018/12/04 2:20pm**



Project due T.B.A



Write programs to generate the following gradient magnitude images and choose proper thresholds to get the binary edge images:

- Roberts operator
- Prewitt edge detector
- Sobel edge detector
- Frei and Chen gradient operator
- Kirsch compass operator
- Robinson compass operator
- Nevatia-Babu 5X5 operator