



# **HW2**

## **Edge Detection and Morphology**



# Task Description

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## Edge detection

- Dataset: [Data](#)
- Sobel and Prewitt
- Canny

## Morphology

- Dataset: [Binary Image](#)
- Four methods (erosion, dilation, opening, and closing)

# Task Description

## Edge detection

Original Image



Sobel



Prewitt



Canny



# Task Description

## Morphology

Original Image



Erosion



Dilation



Opening



Closing



# Report Format and Regulations

## Report

- Report
  - Method description
  - Core code and Environment (including necessary libraries, version, etc.)
  - Result
  - Word 或 PDF (至少4頁標楷體大小為12，單行間距，左右對齊，字數至少800字(不算code))
- Program code
- 2025/11/19 23:59 (UTC+8) Upload to NCUE Cloud Server
- 遲交分數會打折，每隔一天打8折，遲交3天以0分計算

## Regulations

- 關鍵程式碼不能直接呼叫opencv完成，如cv2.dilate、cv2.erode、cv2.Sobel等
- 請自己完成作業，勿分享code與參數
- 抄襲同學(含被抄襲者)皆為0分