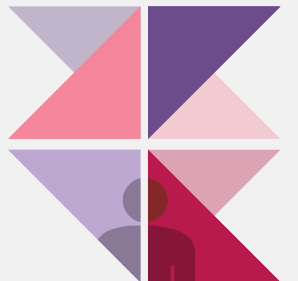




# **HW1**

## **Threshold and Noise Reduction**



# Task Description

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## Threshold

- Dataset: [Data](#)
- Two Local methods
- Two Global methods **excluding maximum likelihood**

## Noise reduction in color image

- Dataset: [Noise Lena Image](#)
- Two methods (such as RGB to HSV, Joint processing, vector filtering, ... etc.)

# Task Description

## Threshold

Original Image



Global thresholding



Local thresholding



# Task Description

## Noise reduction

Original Image



HSV



Joint



# Report Format and Regulations

## Upload

### ➤ 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

- 2025/10/08 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.GaussianBlur**、**cv2.threshold**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**