

Digital Image Processing (IE404)

Assignment 5

Morphological Image Processing

1 Instructions

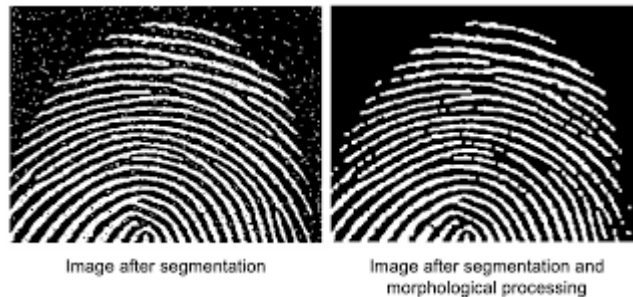
- Implement the following problems in Python or MATLAB.
 - Do not copy code from any source.
 - Prepare a report based on the theory and observations (one report per group).
- Submit the report (PDF format) in the Google Classroom within the deadline.
- The assignments will be evaluated during lab hours.

2 Problems

1. Consider the image of Fig.1, you have to first find Erosion and dilation and compound that result. You have to find the result of a morphological image. Which is shown in Output Image



Figure 1



Output Image



2. Write Python code to perform morphological boundary extraction using erosion and dilation operations.

3. Opening and closing are two fundamental morphological operations used to remove noise, smooth edges, and separate objects in images.