

Assignment 4

Due by November 7, 2019

This project is to study *Otsu* and minimum error thresholding image segmentation algorithms introduced in class.

You are asked to write two image segmentation programs based on Otsu simple thresholding method as taught in class, and/or Kittler and Illingworth's minimum error thresholding method, respectively. Apply your programs on the following images and report your results of binary images.

ler.raw - 100×100 image

Whorl.raw - 512×512 image

Rloop.raw - 512×512 image

linsfN.raw - 640×896 image

linsfT.raw - 640×896 image

shipj.raw - 200×256 image

circleB.tiff - 256×256 image

rectB.tiff - 256×256 image

The input images are put in the directory `"/user/prof/cchen/CS4520/Data"`

In addition to the submission of part of the source codes and your binary segmentation results, you need to give a couple of sentences to discuss or explain how the "segmentation algorithms are applied to get your output" and you are encouraged to do enhancement such as filtering, histogram equalization, and contrast stretching either before or after image segmentation to improve your results. Feel free to make comments on this study.