

Started on Wednesday, 1 September 2021, 10:05 AM
State Finished
Completed on Wednesday, 1 September 2021, 10:14 AM
Time taken 9 mins 1 sec
Grade 7.00 out of 8.00 (87.5%)

Question 1

Incorrect

Mark 0.00 out of 1.00

Given a large image with a small object (foreground) in a big white/grey background, will the average global threshold method provide a good segmentation for the object?

Select one:

- ☒ True ✖
- ☐ False

The correct answer is 'False'.

Question 2

Correct

Mark 1.00 out of 1.00

Given an image with a perfect bimodal pixel intensity histogram (no intersections between the foreground and background in intensities + similar distribution for both peaks), will the otsu's method provide a global threshold that is optimal?

Select one:

- ☒ True ✔
- ☐ False

The correct answer is 'True'.

Question 3

Correct

Mark 1.00 out of 1.00

There is always an optimal global threshold for to segment perfectly every image but it is hard to find.

Select one:

- ☐ True
- ☒ False ✔

The correct answer is 'False'.

Question 4

Correct

Mark 1.00 out of 1.00

Adaptive thresholding provides a different threshold for different parts of the image and this is why it can handle more complicated scenarios.

Select one:

- ☒ True ✓
- ☐ False

The correct answer is 'True'.

Question 5

Correct

Mark 1.00 out of 1.00

Gradients allow us to measure the change in function values

Select one:

- ☒ True ✓
- ☐ False

The correct answer is 'True'.

Question 6

Correct

Mark 1.00 out of 1.00

We can estimate the derivate of an image with simple filters allowing us to detect edges much easier.

Select one:

- ☒ True ✓
- ☐ False

The correct answer is 'True'.

Question 7

Correct

Mark 1.00 out of 1.00

Laplacian Filter combines the second derivatives in x and y directions in one filter and provides better performances when coupled with a gaussian blurring.

Select one:

- ☒ True ✓
- ☐ False

The correct answer is 'True'.

Question 8

Correct

Mark 1.00 out of 1.00

Erosion should be used on historical documents to make them more clear and recover their missing and damaged parts.

Select one:

- ☐ True
- ☒ False ✓

The correct answer is 'False'.