



[Course](#) > [Image...](#) > [Edges...](#) > Lesson...

## Lesson Quiz

Answer the following questions to test your knowledge of the concepts and techniques taught in this lesson.

**Note:** Some of the questions are based on the lab associated with this lesson , so make sure you have explored and run the lab.

### Question 1

1.0/1.0 point (graded)

What type of images from the following list do you think would be most suitable for edge processing?

☐ fields of corn

☐ bunches of grapes

☒ buildings and architecture



### Explanation

Buildings, architecture in general tend to have strong edges. Fields of corn consist of lots of small things, hard to see the edges here. Bunches of grapes are not a good candidate since they tend to be clustered, have overlapping objects (grapes) and lots of small objects.

Submit

You have used 1 of 1 attempt

 Answers are displayed within the problem

## Question 2

1.0/1.0 point (graded)

Which of the following algorithms is used for edge processing?

☐ Goertzel

☐ Viterbi

☒ Sobel



☐ Hinton

### Explanation

Sobel is the algorithm we discuss in the lessons. Goertzel is used as part of signal processing for discrete Fourier transforms for a small range of frequencies. Very handy if you need to do an FFT on a small processor. Viterbi refers to Andrew Viterbi's error recovery in signal processing. Nothing to do with edge detection. Hinton is a reference to Geoff Hinton, the Deep Learning professor.

Submit

You have used 1 of 1 attempt

 Answers are displayed within the problem

## Question 3

1.0/1.0 point (graded)

Which of the following algorithms is used for corner detection?

☒ Harris



☐ HoughLine

☐ Sobel

☐ Carter-Wainwright

### Explanation

Harris is the algorithm we refer to in the lessons/labs. This is a line detection algorithm, not commonly used for corners and the other two answers are not relevant to corner detection.

Submit

You have used 1 of 1 attempt

**i** Answers are displayed within the problem

## Question 4

1.0/1.0 point (graded)

What process lies at the heart of edge detection?

☐ Perturbation

☒ Convolution



☐ Revolution

☐ Distribution

## Explanation

You have used 1 of 1 attempt

**i** Answers are displayed within the problem

## Question 5

1/1 point (graded)

**The following is a question based on the lab in this lesson.** In this lab, you were asked to run the Canny algorithm over a martini glass image with a MinThreshold and a maxThreshold. The edges of interest had to lie within these thresholds. Which set of thresholds most closely match the reference image. ?

☐ a. 1, 2☐ b. 10, 20☒ c. 100, 200☐ d. 1000, 2000

## Explanation

You have used 1 of 1 attempt

**i** Answers are displayed within the problem

## Question 6

1/1 point (graded)

**The following is a question based on the lab in this lesson.** In this lab, we dilated the

output of the Canny algorithm before extracting contours from the image. Which of the following is the correct explanation of why we did this?

☒ a. We were joining up non-contiguous points and edges



☐ b. We were identifying edges in the image.

☐ c. We were locating corners in the image.

☐ d. We were preparing the image for analysis by a CNN.

### Explanation

a. We had to join up non-contiguous points and edges. Edge operators such as Canny, typically, provide disjointed edges and often you need to join up these points and edges yourself.

b. No, we had already identified the edges in the image. c. No, we were not dealing with corners at all. We come to that later in the lab with the work on Harris detection. d. While part of the goal of the lab, in general, is to help us learn about edges and corners as prep for our CNN modules, specifically, dilating the output of Canny does not help with this.

Submit

You have used 1 of 1 attempt

 Answers are displayed within the problem

## Question 7

1/1 point (graded)

**The following is a question based on the lab in this lesson.** In this lab, as part of your work on Harris corners, you were asked to supply a threshold to best match a reference image. Which of these values most closely matches the correct threshold?

☐ a. 0.00001

☒ b. 0.001



☐ c. 1

☐ d. 100

### Explanation

The correct answer is 0.001. All other answers are factors off and would provide inaccurate results.

Submit

You have used 1 of 1 attempt

---

**i** Answers are displayed within the problem

[Learn About Verified Certificates](#)

© All Rights Reserved