



✓ Congratulations! You passed!

TO PASS 80% or higher

Keep Learning

GRADE 80%

The basics of ConvNets

LATEST SUBMISSION GRADE

80%

1. What do you think applying this filter to a grayscale image will do?

0 / 1 point

$$\begin{bmatrix} 0 & 1 & -1 & 0 \\ 1 & 3 & -3 & -1 \\ 1 & 3 & -3 & -1 \\ 0 & 1 & -1 & 0 \end{bmatrix}$$

Detect vertical edges

Incorrect

2. Suppose your input is a 300 by 300 color (RGB) image, and you are not using a convolutional network. If the first hidden layer has 100 neurons, each one fully connected to the input, how many parameters does this hidden layer have (including the bias parameters)?

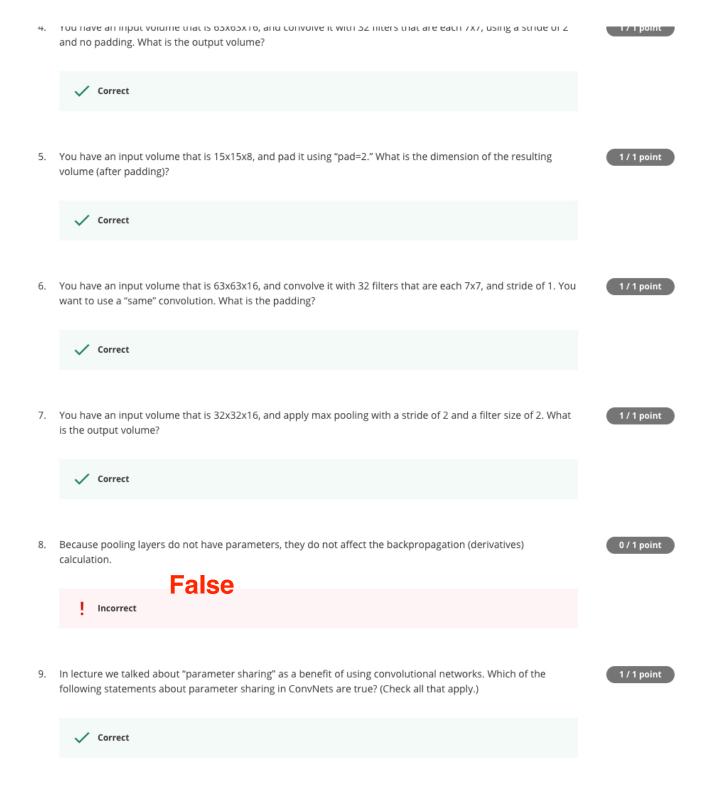
1 / 1 point

✓ Correct

3. Suppose your input is a 300 by 300 color (RGB) image, and you use a convolutional layer with 100 filters that are each 5x5. How many parameters does this hidden layer have (including the bias parameters)?

1/1 point

Correct



10. In lecture we talked about "sparsity of connections" as a benefit of using convolutional layers. What does this mean?

1 / 1 point

✓ Correct