Status	Finished
Started	Monday, 16 September 2024, 11:51 AM
Completed	Monday, 16 September 2024, 12:01 PM
Duration	9 mins 58 secs
Grade	**6.00** out of 6.00 (**100**%)

Question 1

Correct

Mark 1.00 out of 1.00

A multi-layer deep CNN processing black and white images requires multi-channel convolutions

- True ✓
- False

The correct answer is 'True'.

Question 2

Correct

Mark 1.00 out of 1.00

Suppose the input is a 2D image of size 5x5, and the convolution filter is of size 2x2 with stride 1 and no padding.

Then what is the size of the output filter-map?

- a. 2x2
- b. 4x4 ✓
- c. 3x3
- d. 5x5

The correct answer is:
4x4

Question 3

Correct

Mark 1.00 out of 1.00

Suppose the input to a CNN is an image of size 10x10 with 5 channels, and you have apply a filter on the input of size 3x3.

Then what is the number of neurons required to produce the map for this filter?

- a. 9
- b. 64 ✓
- c. 16
- d. 100

The correct answer is:
64

Question 4

Correct

Mark 1.00 out of 1.00

Suppose the input to a CNN is an image of size 10x10 with 5 channels, and you have apply a filter on the input of size 3x3.

Then what is the total number of parameters of all the neurons that produce the map for this filter?

You can assume that the bias of any such neuron is set to 0, and is not considered a parameter.

- a. 64*9 = 576
- b. 9
- c. 45 ✓
- d. 64

The correct answer is:
45

Question 5

Correct

Mark 1.00 out of 1.00

Which one of the following is true?

- a. Backpropogation Through Time can only be done for arbitrary length inputs.
- b. Backpropogation Through Time can only be done for limited length of time, otherwise the training process becomes unstable, irrespective of the input length. ✓

The correct answer is: Backpropogation Through Time can only be done for limited length of time, otherwise the training process becomes unstable, irrespective of the input length.

Question 6

Correct

Mark 1.00 out of 1.00

Which is most suitable encoding method for processing text using an RNN?

a. Words can be encoded as numbers of maximum value "vocabulary length"

b. Words can be encoded as 1-hot vectors of dimension "vocabulary length" ✓

The correct answer is:
Words can be encoded as 1-hot vectors of dimension "vocabulary length"