Unit 14 - Week 12

Assignment 12

The due date for submitting this assignment has passed.
As per our records you have not submitted this assignment.

Due on 2020-04-22, 23:59 IST.

1) If you need to design a model for textual entailment from the text, then which of the following steps will you choose? *1 point*

I. CNN is used to encode the text
II. CNN is used to decode the text
III. RNN is used to decode the text from the encoding
IV. RNN is used to encode the text.
V. RNN is used to encode the text and decode the text.

- IV, II
- I, III
- V
- None of these

No, the answer is incorrect.
Score: 0
Accepted Answers:
V

2) If you need to design a model for transliteration, (i.e. writing a given input word in another language), then which of the following steps will you choose? *1 point*

I. CNN is used to encode
II. CNN is used to decode
III. RNN is used to decode
IV. RNN is used to encode
V. RNN is used to perform both encoding and decoding

- IV, II
- I, III
- V
- None of these

No, the answer is incorrect.
Score: 0
Accepted Answers:
V

3) If you need to design a model for video captioning, then which of the following steps will you choose? *1 point*

I. CNN and RNN is used to encode
II. RNN is used to decode
III. RNN is used to encode
IV. RNN is used to perform both encoding and decoding

- I, II
- II, III
- IV
- None of these

No, the answer is incorrect.
Score: 0
Accepted Answers:
I, II

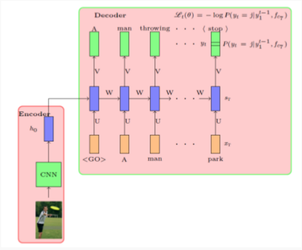
4) If you need to design a model for document summarization, then which of the following steps you will choose? *0 points*

I. CNN is used to encode
II. RNN is used to decode
III. RNN is used to encode
IV. RNN is used to perform both encoding and decoding

- I, II
- II, III
- IV
- None of these

No, the answer is incorrect.
Score: 0
Accepted Answers:
IV

5) Consider the following encoder-decoder model of image captioning where an image is given as an input to the model need to generate captioning of the image. Identify the function of the encoder. *1 point*



- $s_0 = CNN(x_i)$
- $s_0 = CNN(x_{i+U})$
- $s_0 = CNN(U)$
- $s_0 = CNN(x_i)$

No, the answer is incorrect.
Score: 0
Accepted Answers:
$s_0 = CNN(x_i)$

6) In the Image captioning defined in question: 5, what is the output of the decoder? *1 point*

- $s_t = RNN\left(s_t, e(\hat{y}_t)\right) \quad P(y_t|y_1^{t-1}, I) = softmax(V_{s_t} + b)$
- $s_t = CNN\left(s_t, e(\hat{y}_t)\right) \quad P(y_t|y_1^{t-1}, I) = tanh(V_{s_t} + b)$
- $s_t = RNN\left(s_{t-1}, e(\hat{y}_{t-1})\right) \quad P(y_t|y_1^{t-1}, I) = softmax(V_{s_t} + b)$
- $s_t = CNN\left(s_{t-1}, e(\hat{y}_{t-1})\right) \quad P(y_t|y_1^{t-1}, I) = tanh(V_{s_t} + b)$

No, the answer is incorrect.
Score: 0
Accepted Answers:
$s_t = RNN\left(s_{t-1}, e(\hat{y}_{t-1})\right) \quad P(y_t|y_1^{t-1}, I) = softmax(V_{s_t} + b)$

7) In the image captioning defined in question:5, write the equation of the loss function. *0 points*

- $L(\theta) = -\sum_{i=1}^{T} logP(y_t = l_t|y_1^{t-1}, I)$
- $L(\theta) = -\sum_{i=1}^{T} logP(y_t = l_t|y_1^{t+1}, I)$
- None of these

No, the answer is incorrect.
Score: 0
Accepted Answers:
$L(\theta) = -\sum_{i=1}^{T} logP(y_t = l_t|y_1^{t-1}, I)$

8) Applications of the encoder decoder architecture are? *1 point*

- Image captioning
- Textual entailment
- Machine translation
- Only b) and c)
- All the above

No, the answer is incorrect.
Score: 0
Accepted Answers:
All the above

9) For document classification and summarization, it is important to look at the important sentences and important words. What kind of "attention" mechanism is required for encoding? *1 point*

- Hierarchical
- Ungraded
- Sequential
- Unordered

No, the answer is incorrect.
Score: 0
Accepted Answers:
Hierarchical

10) The problem of generating the sentence given an image can be possibly solved with the encoder-decoder architecture. *1 point*

- Yes
- No

No, the answer is incorrect.
Score: 0
Accepted Answers:
Yes