Unit 7 - Week 6

Assignment 6

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

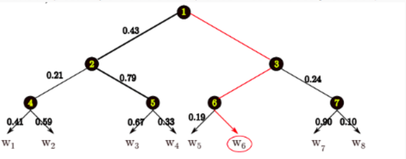
Due on 2019-09-17, 23:59 IST.

1) What is the height of the balanced binary tree. if the vocabulary size is 128? *1 point*

- 64
- 32
- 7
- None of the above

No, the answer is incorrect.
Score: 0
Accepted Answers:
7

2) What is the probability of the word 6 w_6 (marked in red in the tree given below)? *1 point*



- 0.14
- 0.28
- 0.35
- None of the above

No, the answer is incorrect.
Score: 0
Accepted Answers:
0.35

3) The statement "Hierarchical Softmax does not provide a unique path to each word in the vocabulary" is *1 point*

- True
- False

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

4) In the hierarchical Softmax model, the ANN learns the probabilistic decisions at every node. Is the statement true? *1 point*

- True
- False

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

5) In the hierarchical Softmax model, the probability mass of 1 is NOT distributed across the vocabulary and $\sum_i P(w_i) \neq 1$. Is this statement correct? *1 point*

- True
- False

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

6) The most frequent words are kept at a shorter distance from the root by _____ *1 point*

- Transform coding
- Huffman encoding
- Run-length encoding
- None of the above

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

7) Is the statement "Hierarchical Softmax increases the computation complexity when compared to Softmax" true? *1 point*

- True
- False

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

8) The RNN imposes a constraint on the length of the input of words. Is the above statement correct? *1 point*

- Yes
- No

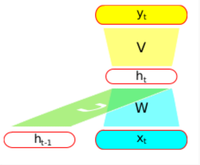
No, the answer is incorrect.
Score: 0
Accepted Answers:
No

9) What is the most important architectural change introduced in the recurrent neural network? *1 point*

- Multiple hidden layers
- Word embedding as input
- Hierarchical Softmax layer
- State vector
- None of the above

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

10) Using the RNN given in the figure, what is the state of h_t at time t? *1 point*



- $h_t = \tanh(W_{x_t})$
- $h_t = \tanh(U+W_{x_t})$
- $h_t = \tanh(Uh_{t-1}W_{x_t})$
- $h_t = \tanh(Uh_{t-1} + W_{x_t})$
- None of the above

No, the answer is incorrect.
Score: 0
Accepted Answers:
$h_t = \tanh(Uh_{t-1} + W_{x_t})$