

START OF QUIZ

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Question 1

Topic: Topic3

Source: Lecture 3

In your own words, explain the Markov assumption, and how it is used for language modeling.

Question 2

Topic: Topic1

Source: Lecture 1

Explain what modifications would need to be made to our dynamic edit distance algorithm to incorporate weighted edit distance.

Question 3

Topic: Topic4

Source: Lecture 4

Briefly describe why soft EM might provide more accurate tagging results than hard EM.

Question 4

Topic: Topic1

Source: Lecture 1

Suppose we are filling the table for the Levenshtein distance algorithm. We are in cell (x, y) . The values of cell $(x-1, y-1)$, $(x-1, y)$, and $(x, y-1)$ are 1, 0, and 3, respectively. What is the value we will put in cell (x, y) , given that the letters are NOT equal?

Question 5

Topic: Topic4

Source: Lecture 4

What is the main difference between the Viterbi algorithm and the Forward algorithm, and why does it allow us to find the optimal path through a sequence?

Question 6

Topic: Topic2

Source: Lecture 2

How do we choose the number of clusters for K-means? What are the consequences if we choose poorly?

Question 7

Topic: Topic3

Source: Lecture 3

Describe the noisy channel model, and how it can be used to represent ASR.

Question 8

Topic: Topic2

Source: Lecture 2

Why is the Forgy initialization sub-optimal?

Question 9

Topic: Coding

Source: Lecture 3

In class, we built a collocation matrix for a bigram language model. Modify the function so that it can handle trigram language model and implements "add-alpha" smoothing, instead of "add-one" smoothing.

END OF QUIZ