

START OF QUIZ

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Question 1

Topic: Lecture 2

Source: Lecture 2

Discuss the purpose of the linkage criterion in hierarchical clustering (1)

Question 2

Topic: Lecture 4

Source: Lecture 4

Iterative algorithms often require a stopping condition. Briefly explain why this is necessary, and why perplexity is a metric to use for stopping HMMs. (2)

Question 3

Topic: Lecture 4

Source: Lecture 4

Imagine that we are doing ASR instead of POS tagging. Briefly describe what the emissions and transitions would be. (2)

Question 4

Topic: Lecture 3

Source: Lecture 3

Why do we use log-probability instead of linear probability? (1)

Question 5

Topic: Lecture 1

Source: Lecture 1

Do you think cosine similarity is more similar to Hamming distance or Levenshtein distance? Explain. Also briefly explain how it differs from your choice. (2)

Question 6

Topic: Lecture 2

Source: Lecture 2

Why do outliers cause problems for clustering algorithms like k-means? How can we deal with them? (1)

Question 7

Topic: Lecture 1

Source: Lecture 1

Explain why edit distance (given our formulation) will always choose a substitution, if it can. (1)

Question 8

Topic: Lecture 3

Source: Lecture 3

Explain the purpose of Laplace smoothing, and how it accomplishes its goal. (1)

Question 9

Topic: Long

Source: Lecture 1

We've all had an instance of autocorrect suggesting a bizarre correction for something. Given what you know about word similarity for error correction, explain why autocorrect doesn't always pick the word with the lowest edit distance. (3)

END OF QUIZ