

START OF QUIZ
Student ID:
19668508,Li,Julian

Question 1

Topic: Lecture 6

Source: Lecture 6

Explain how an MSD differs from a POS tag, and how it's similar. (1)

Question 2

Topic: Lecture 7

Source: Lecture 7

Other than characters, we didn't really discuss subword units for inflection. Do you think that BPE would be useful in an inflectional model? Explain briefly. (1)

Question 3

Topic: Lecture 5

Source: Lecture 5

Why is a majority tagger such a strong baseline for POS tagging? (1)

Question 4

Topic: Lecture 6

Source: Lecture 6

Even if we're only interested in lemmas, do you think it's worthwhile to produce MSDs, as well? Why or why not? (1)

Question 5

Topic: Lecture 7

Source: Lecture 7

When generating inflections, what features of the input do you think the model most attends to? (1)

Question 6

Topic: Lecture 8

Source: Lecture 8

Imagine we have a good neural morphological analyzer, and we want to inject the knowledge into a larger NLP DL model (like an LLM, etc.). How might we do so in an efficient way? (2)

Question 7

Topic: Lecture 8

Source: Lecture 8

Imagine we were designing a probe to understand whether a model were gender biased. How might we design such a probe, and if we found the model to exhibit such a bias, what suggestions would you make to neutralize the bias? (2)

Question 8

Topic: Lecture 5

Source: Lecture 5

Imagine that we have some pre-trained multilingual embeddings of really high quality. We train a POS tagger for a very common language, with lots of data, embedding the data with the multilingual embeddings. At inference, we then replace the input with another language. Do you think the tagger would beat a majority baseline? Explain your reasoning, and list any assumptions. (2)

Question 9

Topic: Long

Source: Lecture 5

In class, we talked about how POS and morphological information is often latently encoded in word embeddings, but not in character embeddings. Let's think about subword embeddings, since most DL models are going to use subword representations. If a word is split, where do you think this information is encoded, and does it matter? Explain your reasoning.
(3)

END OF QUIZ