# START OF QUIZ Student ID: 44918563,Piche,Cole

Topic: Lecture 5 Source: Lecture 5

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

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)

Topic: Lecture 6 Source: Lecture 6

In class, we discussed why a "Universal Morphology" might not actually be possible. Briefly explain why. (1)

Topic: Lecture 8 Source: Lecture 8

Nonce words are almost always in open classes of words, but there are some exceptions (such as pronouns, which do allow some flexibility). Do you think that LLMs would react to new words in traditionally closed classes the same way as in open classes? (1)

Topic: Lecture 8 Source: Lecture 8

Where do you think pragmatic learning (ie, intent) might fall within the layers of an LLM? Explain briefly. How might we test for it? (1)

Topic: Lecture 5 Source: Lecture 5

In DSCI 563, we discussed EM for POS tagging. Let's make it neural. Assume we have a small set of gold annotated sentences (100). How could we use contextualized embeddings to bootstrap more annotated data (assume that fine-tuning doesn't work)? (2)

Topic: Lecture 7 Source: Lecture 7

Imagine that we want to improve the quality of a morphological inflector/analyser, and we want to do so through multi-task learning (ie, two decoders predicting different tasks, with a composite loss function). Can you think of a task that might benefit morphological processing? Explain. (2)

Topic: Lecture 7 Source: Lecture 7

What benefits might encoding MSDs with a second encoder have over a single encoder approach? Can you think of any disadvantages? (2)

Topic: Long

Source: Lecture 8

Humans are pretty good at learning the morphology of their language, but they make mistakes. Kids will typically learn irregular morphology before regular morphology, then forget it, and then reacquire it (for example, kids will learn "I went outside", then transition to "I goed outside", before eventually coming back to "I went outside"). From your understanding of how DL models work, do you expect something similar to happen within neural language tools? Explain why this might or might not be the case. (3)

# END OF QUIZ