## START OF QUIZ Student ID: 97713317,Song,Shawn

Topic: Lecture 7 Source: Lecture 7

Describe elision in terms of edit actions. (1)

Topic: Lecture 8 Source: Lecture 8

Why do you think that LLMs learn syntax earlier in the model than morphology? (1)

Topic: Lecture 6 Source: Lecture 6

What is the purpose of using normalized edit distance in the evaluation of a morphological analyzer? (1)

Topic: Lecture 5 Source: Lecture 5

Why is POS information so important (whether via tagging or embedded information)? (1)

Topic: Lecture 5 Source: Lecture 5

Why do we attach an embedding layer before passing information to the hidden layer(s)? (1)

Topic: Lecture 6 Source: Lecture 6

Feature engineering can be incorporated into encoder-decoder models through the use of multiple encoders. If you could have any extra annotation for morphological analysis, and were able to pass each through a separate encoder, what types of features would you include? Do you see any potential problems with using this extra annotation? (2)

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)

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: Long

Source: Lecture 6

Linguistic determinism is the (somewhat outdated, and originally quite racist) idea that the language we speak shapes the way that we see the world. Although it's been shown to only have a small influence on humans (called weak determinism), there haven't really been many studies that look into it in machines. However, given that our methodologies are so heavily influenced by embedding spaces, we can say that modern ML models are entirely shaped by the language they speak (the language here being the constraints of the embedding space). If we had a well-annotated morphological corpus, how might we set up an experiment to test this theory? (3)

# END OF QUIZ