

START OF QUIZ

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Question 1

Topic: Lecture 1

Source: Lecture 1

What is the relationship between a fruit and a banana?

Question 2

Topic: Lecture 2

Source: Lecture 2

In class, I mentioned that we rarely do WSD explicitly, because we would need one model / word. In COLX 521, we saw that we could lemmatize words to reduce them to a common form. Why couldn't we do something similar (like reducing all synonyms to a common hypernym) for WSD? (2)

Question 3

Topic: Lecture 3

Source: Lecture 3

What is the Modus Ponens conclusion available from the following statements (if Modus Ponens does not apply, state so) Explain. Examples: A: Only humans attend University. B: Bill attends University; C: ?; A: All red cars are fast. B: Alice's car is blue. C: ?; A: Cheese is made from milk B: Mice like cheese. C: ?; A: Rain is necessary for plants to grow. B: It has not been raining. C: ? (1)

Question 4

Topic: Lecture 3

Source: Lecture 3

Is implication transitive? That is, if $A \rightarrow B$, and $B \rightarrow C$, does $A \rightarrow C$? Explain. (1)

Question 5

Topic: Lecture 4

Source: Lecture 4

Some verbs in English can take either one or two objects (such as "see" - I see a bird vs. I see a bird with binoculars). Explain, in terms of lambda calculus, why we would need separate predicates for these different uses of "see". (2)

Question 6

Topic: Lecture 4

Source: Lecture 4

How would you describe the following sentence in FOL (you don't need to write the FOL statement - just describe how it would be structured)? While seeking revenge, dig two graves - one for your enemy, and one for yourself.

Question 7

Topic: Lecture 1

Source: Lecture 1

Should we lemmatize prior to looking up a word's sense? Why or why not? (1)

Question 8

Topic: Lecture 2

Source: Lecture 2

Describe why the "most frequent sense" baseline is so strong. What are some assumptions that it makes? (2)

Question 9

Topic: Long

Source: Lecture 2

Neural models are often seen as a black box, where all we can observe is the output. That said, there is a lot of information available in the output of a neural model. Briefly describe how you might be able to use tools like LIWC (or GI) to build an AI-detector. Please list any assumptions about available data and experiments you would have to run. (3)

END OF QUIZ