

START OF QUIZ

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Question 1

Topic: Lecture 2

Source: Lecture 2

Consider the following sentences: “James married Joyce in 2010. Their son Ulysses was born in 2013. In 2015, James and Joyce divorced.” Extract all of the RDF triples you can from the sequence. (2)

Question 2

Topic: Lecture 4

Source: Lecture 4

In both of our neural examples for SRL, we provided an explicit indicator of the predicate (either as a binary feature, or as a separate feature to Bert). Why do you think this is necessary? (1)

Question 3

Topic: Lecture 3

Source: Lecture 3

Thinking in terms of vector semantics, do you think that each dimension of word embeddings could be considered a “semantic fundamental” (like “speaking”, “load”, “incoherent”, etc.). Briefly explain. (1)

Question 4

Topic: Lecture 4

Source: Lecture 4

We talked about a few other constraints for the ILP solver, such as making sure that "ARG0 must occur before ARG1". How would you implement this as an ILP constraint? (You don't need to write the pulp code - just explain how you would force the constraint.) (2)

Question 5

Topic: Lecture 1

Source: Lecture 1

Briefly explain the role of a gazetteer, and one way of creating one. (1)

Question 6

Topic: Lecture 1

Source: Lecture 1

Why are CRFs generally preferable to HMMs when it comes to NER? (1)

Question 7

Topic: Lecture 3

Source: Lecture 3

Roles like “Subject / Object” don’t translate very well across some languages (most notably between Nominative-Accusative languages like English, and Ergative-Absolutive languages, like Basque). Do you think that semantic roles are more likely to be consistent? Briefly explain why or why not. (2)

Question 8

Topic: Lecture 2

Source: Lecture 2

Explain how relation extraction and named entity recognition are related, and how they differ. (1)

Question 9

Topic: Coding

Source: Lecture 1

In class, we briefly mentioned that F1 score may be too harsh for NER (If our model finds part of an entity, it should get partial credit). Write code that calculates this more generous measure. If the system discovers the first word in the entity (ie, "Charles" for "Charles M. Burns"), it should get 0.5 points, instead of the full 1 point it would get for the whole name. (We'll stick to the first word, only - if we consider any part, it gets tricky: what if our system identifies "Charles" and "M. Burns" as two separate entities?) (3)

END OF QUIZ