

**START OF QUIZ**

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## Question 1

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 2

Topic: Lecture 2

Source: Lecture 2

How can we use POS/morphological tagging to aid in temporal relation extraction? (1)

## Question 3

Topic: Lecture 1

Source: Lecture 1

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

## Question 4

Topic: Lecture 3

Source: Lecture 3

How can semantic roles be used to identify relations in relation extraction? How can they help us identify false positives from our system? (2)

## Question 5

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 6

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 7

Topic: Lecture 1

Source: Lecture 1

Explain one way that NER tagging is similar to POS tagging, and two ways it's different. (1)



## Question 8

Topic: Lecture 4

Source: Lecture 4

Can you think of a way to combine the two neural SRL models we looked at in class? (1)

## Question 9

Topic: Coding

Source: Lecture 4

Assume that our fancy SR labeler has been run on the following sentence: "Do androids dream of electric sheep?" Imagine that we ran the sentence with 2 different predicates: "dream" and "do", and obtained the following scores. NP1 = (NP(NNs androids)) NP2 = (NP(JJ electric NNS sheep)) NP3 = (PP(of (NP2)) do: NP1: 0.5, 0.3 NP2: 0.3, 0.5 NP3: 0.2, 0.4 dream: NP1: 0.4, 0.6 NP2: 0.2, 0.3 NP3: 0.4, 0.7 Assuming the standard constraints we talked about in class, what is the most likely parse? Show your work! (3)

**END OF QUIZ**