

START OF QUIZ

Student ID:

47881305,Hrabowsky,Zenon

Question 1

Topic: Lecture 4

Source: Lecture 4

Along with the features described in class for non-neural SRL, suggest 2 other features that we could use. (1)

Question 2

Topic: Lecture 3

Source: Lecture 3

The sentences “The man ate a sandwich” and “The sandwich ate a man” are both syntactically correct (DET NN VB DT NN), but only the first one is semantically correct. With reference to theta roles, explain why this is the case. (1)

Question 3

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 4

Topic: Lecture 3

Source: Lecture 3

Give an example of a sentence where the subject is also the theme of the sentence (hint: it might have a special sentence structure). (1)

Question 5

Topic: Lecture 1

Source: Lecture 1

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

Question 6

Topic: Lecture 1

Source: Lecture 1

Imagine that we were using the Viterbi algorithm to ensure that our sequence of NER tags is valid. What might the scores in the transition matrix look like? (2)

Question 7

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 8

Topic: Lecture 2

Source: Lecture 2

What are the steps necessary for normalizing temporal events? (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