START OF QUIZ Student ID: 88683578,Mao,MingJia

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)

Topic: Lecture 4 Source: Lecture 4

Why do you think that we pass the output of our classifier to an ILP solver instead of just incorporating the constraints into the model? (1)

Topic: Lecture 2 Source: Lecture 2

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

Topic: Lecture 1 Source: Lecture 1

Give a BIO tagging of the following sentence: "On the 24th of February 1815, the lookout at Notre-Dame de la Garde signalled the arrival of the three-master Pharaon, coming from Smyrna, Trieste and Naples." (2)

Topic: Lecture 2 Source: Lecture 2

Identify the events in the following sentences, and place them in order. Identify the cues you used to determine the order. Every morning, on my walk to the University, I read an audiobook while watching for birds. I start up my laptop after I get to class, and then wait for students to arrive so I can start the lecture. (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)

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)

Topic: Lecture 1 Source: Lecture 1

Briefly describe the difference between micro- and macro-F1, which one is more appropriate for NER tagging, and why. (1)

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