START OF QUIZ Student ID: 49919301,Keigan,Jonathan

Topic: Lecture 4 Source: Lecture 4

Describe the key differences between the forward and backward steps of the forward-backward algorithm. (1)

Topic: Lecture 4 Source: Lecture 4

Could you implement Viterbi as an extension of the forward-backward algorithm? What additional constraints might be needed, if so? (1)

Topic: Lecture 2 Source: Lecture 2

Explain the difference between domain and task, and how this difference impacts transfer learning. (1)

Topic: Lecture 3 Source: Lecture 3

What benefits does delexicalization bring to the training of dependency parsers? Can you think of other tasks that might benefit from it? (1)

Topic: Lecture 2 Source: Lecture 2

Describe the main difference between continued training and multi-task learning. (1)

Topic: Lecture 1 Source: Lecture 1

Many existing tools and annotation formats make assumptions about the languages that they are processing. If you were creating an ML corpus for a new language, would you prefer to start from scratch, or to adapt an existing annotation schema? Would this change depending on if you were working with a Class 1 or a Class 5 language? Explain. (2)

Topic: Lecture 3 Source: Lecture 3

Imagine that we have a huge amount of unlabeled data in Marathi - enough to train some contextual word embeddings. We want to start creating some tools, and want to use our an embedding set from Hindi to start tagging Marathi. Given that Marathi and Hindi are related languages written in the same script (with some differences), how can we leverage every bit of information we have, and what else might we need to maximize the quality of our Marathi tools? (2)

Topic: Lecture 1 Source: Lecture 1

When working with underserved languages, field linguists often collect data from speakers on site. What ethical considerations must be taken into account when gathering linguistic data from these communities? (2)

Topic: Long

Source: Lecture 1

Let's talk about sign languages. Many sign languages lack an orthography (ie, they are not written), and while some signers may also speak while signing, this is typically a translation from the signed language into a spoken one. This can make it difficult to build automatic tools for sign languages. If you were tasked with building a tool such as a POS tagger or translation system for sign language, what resources might you need, and how would you go about it? (3)

END OF QUIZ