## START OF QUIZ Student ID: 44918563,Piche,Cole

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

Explain the concept of linguistic anchors with respect to multilingual embeddings. (1)

Topic: Lecture 1 Source: Lecture 1

Many languages lack a standardized writing system. How does this impact the creation of NLP tools, and how might we approach building CL tools for such languages? (1)

Topic: Lecture 4 Source: Lecture 4

What's the intuition behind using the forward-backward algorithm for HMM state probability calculation? (1)

Topic: Lecture 1 Source: Lecture 1

Imagine a language is described as "low-resource". If you could create a single automated tool for the language, what would it be? List any assumptions. (1)

Topic: Lecture 4 Source: Lecture 4

I've said a few times that the syntax dominates the signal (especially for languages with less free word order). Where have we seen this, and what does it mean for semi-supervised tagging? (2)

Topic: Lecture 3 Source: Lecture 3

Imagine that we find a database lying around, and it's been very poorly maintained and documented. All we know is that it contains word embeddings for a language written in Arabic script (assume we can't read it, and the only Arabic speakers we know also can't read it - it's in a language they don't know). How might we go about trying to identify the language that it's written in, without finding speakers of all of the Arabic-derived languages? (2)

Topic: Lecture 2 Source: Lecture 2

Isolate languages do not have any known related languages (Ainu, Xaat Kíl, and Klingon are some examples). How might you approach using cross-lingual transfer for an isolate? (2)

Topic: Long

Source: Lecture 2

When two languages come into contact, a pidgin is often formed, typically incorporating lexemes, syntax, and sometimes morphology from both languages, but it is often simplified and incomplete, serving only the immediate communicative needs. Over time, if children grow up speaking the pidgin, they can expand it into a full-fledged language — a creole. Given that creoles evolve from this contact and expansion process, how might transfer learning be used to develop NLP tools for a creole language? How might the parent languages influence decisions on which language features to prioritize, and how could transfer learning from these parent languages help or hinder the development of these tools? (3)

# END OF QUIZ