Reading Assignment 2

COMP 550, Fall 2024

Due date: Nov 1, 2024 9:00pm

Read the following paper and write a critical summary of it:

> Hewitt and Manning, 2019. A Structural Probe for Finding Syntax in Word Representations. *NAACL-HLT.*
>
> https://aclanthology.org/N19-1419.pdf

Your summary should include a description of the paper's contents, its strengths and limitations, and any points that you did not understand. Since this paper discusses models that are not covered in the lectures, I expect that there will be concepts that you do not understand! Do not worry, and document this in your write-up.

Also, discuss the following issues in your writeup:

1. Is the proposed probing approach supervised or unsupervised? What are the advantages and disadvantages of using each approach to probe a model for its syntactic knowledge?
2. Why is it important to probe a model for its syntactic knowledge in the first place? You can answer this question in terms of either practical or theoretical considerations.

Your summary should be **at most 1 page**. It will be graded on the basis of its coverage, linguistic quality, and clarity of argumentation.

Resources
- Jason Eisner's guide to reading papers: https://www.cs.jhu.edu/~jason/advice/how-to-read-a-paper.html
- It may help to read this tutorial on convolutional neural networks for NLP by Denny Britz before reading the paper: http://www.wildml.com/2015/11/understanding-convolutional-neural-networks-for-nlp/