# Reading Assignment 2

COMP 550, Fall 2023

**Due date**: Oct 31, 2023 9:00pm

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

> Vinyals et al., 2015. Grammar as a Foreign Language.  *Advances in Neural Information Processing 28.*
> https://proceedings.neurips.cc/paper_files/paper/2015/file/277281aada22045c03945dcb2ca6f2ec-Paper.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 techniques 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. Compare and contrast the parsing approach proposed in this paper to that of something like the CYK algorithm. What are their main advantages and disadvantages?
2. The proposed method really shines when it is trained on the expanded set of ~11M parsed sentences. Why do you think this is the case? Relate this approach to ideas that we have discussed in class (not necessarily to do with parsing).

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/