Reading #3: tree kernel

Basics

- Paper: Collins and Duffy 2001

- Due: Feb 25 **at 11am**

Questions

- Suppose you want to build a reranking for parsing using SVM. According to the paper:
  - Q1: What does training data look like? That is, a classifier is trained with (x, y) pairs. For this reranking problem, what is x and what is y?
  - Q2: What happens at test time? That is, what formulas does one need to calculate in order to determine the correct ranking of the candidate parse trees?

Questions

- Q3: Conceptually, a parse tree is represented as a feature vector. What are the features? What are the feature values? How many features are there?

- Q4: In practice, is it necessary to represent a parse tree as a feature vector? Why or why not?