Reading #3: tree kernel

- Paper: (Collins and Duffy, 2001)

- Due date: 11am on 2/28

Questions

According to the paper, suppose you want to build a reranking for parsing using SVM:

- 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 the test time? That is, what formula(s) one needs to calculate in order to determine the correct ranking of the candidate parse trees?

- 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?