Writeup The remaining 20 points of this part is decided on the basis of a short writeup. In your writeup,

you should report three things:

1. Report accuracy and runtime for your CRF model using both Viterbi and at least 4 different values

of the beam size, including beam size 1. (You can plot these values as a graph or in a table.)

2. Describe what trends you see in accuracy and runtime. How does beam search compare to your expec-

tations here?

3. Under what circumstances do you think beam search would be more effective relative to Viterbi? That

is, what characteristics of a problem (sequence length, number of states, model, features, etc.) would

change what you’ve observed?

Peer Assessment When doing the peer assessment, your job is not to assign a grade. Instead, comment

on the following factors:

1. Did the student complete the assignment as specified (include all the parts above)? (yes/no question)

2. Did the student’s analysis logically make sense given their results? (1-3 sentences)

3. How did the student’s analysis of their results compare to yours? Did you observe similar or different

trends? If you observed differences, describe why you think these might’ve happened. (1-3 sentences)

Submission and Grading

You will upload your code and trained model to Gradescope. (Training is time-consuming, so the auto-

grader will not be retraining your model; it’ll use the one you upload.) Additionally, you will submit your