START OF QUIZ
Student ID:
49852049,Wang,Marco

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I agree that all answers provided are in my own words, and that I will not discuss the contents of this quiz with any of my fellow students until after the exam period has completed for everyone. Furthermore, any response that used generative AI tools has been rephrased into my own interpretation, and has been appropriately cited.

Signature: _____

Question 1

Topic: Lecture 5
Source: Lecture 5

What does each cell in the CYK chart represent (ie, what does cell 2,5 represent)? (1)

Question 2

Topic: Lecture 5
Source: Lecture 5

Describe why CNF is necessary for the CYK algorithm. (1)

Question 3

Topic: Lecture 8
Source: Lecture 8

Describe what we mean by a cascaded learning model, and one advantage and disadvantage to using one. (1)

Question 4

Topic: Lecture 7
Source: Lecture 7

Briefly describe how dependency parsing differs from constituency parsing. (1)

Question 5

Topic: Lecture 6
Source: Lecture 6

What does it mean for an Earley item to be "complete," and what happens when it is? (1)

Question 6

Topic: Lecture 7
Source: Lecture 7

A deque is a data structure that mimics the operations of both a stack and a queue (ie, items can be added or removed to either end). Do you think this data structure would be sufficient to replace the stack and buffer from SR parsing? Justify your answer. (2)

Question 7

Topic: Lecture 6
Source: Lecture 6

If you have a sentence (or, more generally, a language) with more nesting structures, would you prefer to parse with Earley or CYK? Explain. (2)

Question 8

Topic: Lecture 8
Source: Lecture 8

In class, we discussed creating a feature vector as input to a classification model. What benefits (or disadvantages) might we see by replacing binary features with word embeddings, instead? (2)

Question 9

Topic: Long
Source: Lecture 7

Imagine we have a very small treebank, and a large amount of unannotated data. How might we leverage this to iteratively train a reasonable-quality parser? What potential problems do you think we might encounter along the way? How might we try to solve these problems? (3)

END OF QUIZ