M23CS7.501: Advanced Natural Language Processing

Mid Semester Exam

Sep 22, 2023

MM: 30

Time: 1.5 hrs

Note: Marks are mentioned next to the questions.

1. Explain how RNNs enable handling long distance dependencies. Can you compare LSTMs and GRUs at an architectural level?

 $[5+5 \cdot marks]$

2. Describe the ELMO Contextual embedding model. How is it used for downstream tasks? [5+5 marks]

3. Describe a sequence-to-sequence machine translation model where decoder pays attention to the encoder. Why is the attention needed?

[3 + 7 marks]