Assignment 3

Due: April 15, 2020

1 [5pt]. Analyze Figure 4 in [1], compare the system output and ground-truth, summarize the remaining challenges and propose solutions to address them.

2 [5pt]. In [2], the authors propose two different ways to encode dependency structures into abstractive summarization, describe the pros and cons of each method. What if we want to incorporate richer structures such as Abstract Meaning Representation? Can you propose more ideas to incorporate structures for abstractive summarization?

3 [5pt]. Propose at least three ideas on utilizing AMR for abstractive summarization. These ideas should be superior to the simple sentence pruning method described in [3].

References:

[1] Alexander M. Rush, Sumit Chopra and Jason Weston. 2015. A Neural Attention Model for Sentence Summarization. Proc. EMNLP2015.

[2] Kaiqiang Song, Lin Zhao and Fei Liu. 2018. Structure-Infused Copy Mechanisms for Abstractive Summarization. Proc. COLING2018.

[3] Hardy and Andreas Vlachos. 2018. Guided Neural Language Generation for Abstractive Summarization using Abstract Meaning Representation. Proc. EMNLP2018.

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