Abstract

In this paper, we offer a corpus of question answer pairs related to the TV series generated from paragraph contexts. The data set called GameOfThronesQA V1.0 contains 5237 unique question answer pairs from the Game Of Thrones TV series across the eight seasons. We provide a pipeline approach for answer aware question generation, where the answers are extracted based on the named entities from the TV series.

Objectives

Steps to generate the answer-aware question-answer pairs –
• Approach for selecting answer spans from the named entities.
• Approach to generate questions based on answers, including a sequence-level classification, a span level prediction, and a token-level prediction.
• Combined pipeline approach to output the question answer pairs.

Methodology

Answer Span Selection: Defined by using two token formats - Unique Prepend format [SEP] token and Unique Highlight format is noted as the [HL] token

Answer Aware Question Generation (AAQG) Model: Works on the principle of sequential question generation by fine-tuning adapted BERT-HLSQG

Question Answer Pair Output: Three Tasks - i) gg - single question generation , ii) multi-qa-qq for multiple QA pairs generation and iii) e2e-qq for end-to-end QA pair generation.

Sample GameOfThronesQA dataset json

Comparison with Baseline Datasets

<table>
<thead>
<tr>
<th>Dataset</th>
<th>Distribution Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>TweetQA</td>
<td>42.3% 29.3% 7.9% 7.0% 2.6% 2.4% 2.1% 6.3%</td>
</tr>
<tr>
<td>GameOfThronesQA</td>
<td>40 41 4 7 5 1 1 5</td>
</tr>
</tbody>
</table>

Conclusion

• Provided question answering dataset called GameOfThronesQA whose content comes from the Game of Thrones Wiki Web page.
• Investigated data set with other state-of-the-art question answering sets such as TriviaQA, TweetQA, WikiQA and SQuAD.
• Observed that our data set (1) has good match and F1 scores on the QA pairs, (2) has a different focus on question types which reflects in the "who" and "what" questions because of named entities in answer spans.

Acknowledgements

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