

AQUAMUSE: Release notes V2

About this release

- Includes all query-long answer pairs from Natural Questions dataset that satisfy the criteria discussed in the paper <https://arxiv.org/pdf/2010.12694.pdf>.

Data set statistics

| Dataset | # queries | # examples | | | summary | | inputs | | per-input doc | |
|----------|-----------|------------|-----|------|---------|---------|---------|---------|---------------|---------|
| | | train | dev | test | # words | # sents | # words | # sents | # words | # sents |
| AQUAMUSE | 7,725 | 6,253 | 661 | 811 | 107.8 | 3.7 | 9744.2 | 390.6 | 1601.5 | 64.2 |

Table 1: Number of examples and average inputs and summary sizes in this release.

Baselines

| Method | R-1 | R-2 | R-L |
|------------------------------|-------|------|-------|
| Query-agnostic setting | | | |
| PEGASUS Zhang et al. (2019a) | 25.2 | 6.78 | 12.86 |
| Query-based setting | | | |
| PEGASUS | 24.62 | 5.78 | 17.16 |

Table 2: Abstractive baseline evaluation on test split

| Method | R-1 | R-2 | R-L |
|------------------------------------|-------|-------|-------|
| Query-agnostic setting | | | |
| NeuSum Zhou et al. (2018) | 45.83 | 34.69 | 44.38 |
| HIBERT Zhang et al. (2019b) | 44.2 | 28.71 | 32.08 |
| TextRank Mihalcea and Tarau (2004) | 24.4 | 15.56 | 31.6 |
| Query-based setting | | | |
| NeuSum | 47.40 | 36.13 | 46.27 |
| HIBERT | 44.96 | 29.73 | 32.96 |
| TextRank | 25.72 | 17.4 | 34.3 |

Table 3: Extractive baseline evaluation on test split

References

- Rada Mihalcea and Paul Tarau. 2004. <https://www.aclweb.org/anthology/W04-3252> TextRank: Bringing order into text. In *Proceedings of the 2004 Conference on Empirical Methods in Natural Language Processing*, pages 404–411, Barcelona, Spain. Association for Computational Linguistics.
- Jingqing Zhang, Yao Zhao, Mohammad Saleh, and Peter J. Liu. 2019a. Pegasus: Pre-training with extracted gap-sentences for abstractive summarization. *ArXiv*, abs/1912.08777.
- Xingxing Zhang, Furu Wei, and Ming Zhou. 2019b. <http://arxiv.org/abs/1905.06566> HIBERT: document level pre-training of hierarchical bidirectional transformers for document summarization. *CoRR*, abs/1905.06566.
- Qingyu Zhou, Nan Yang, Furu Wei, Shaohan Huang, Ming Zhou, and Tiejun Zhao. 2018. <https://doi.org/10.18653/v1/P18-1061> Neural document summarization by jointly learning to score and select sentences. In *Proceedings of the 56th Annual Meeting of the Association for Computational Linguistics (Volume 1: Long Papers)*, pages 654–663, Melbourne, Australia. Association for Computational Linguistics.