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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| LCSTS | | | | | | | | | | |
| 标题 | 摘要 | | Rouge1 | | Rouge2 | | RougeL | | 备注 | |
| 2018-A Hybrid Word-Character Model for Abstractive Summarization | 以往的模型只使用字符级的方法来解决oov问题，而本模型同时使用字符级和词级的方法。 | | 38.81 | | 26.01 | | 35.95 | | 使用char-based | |
| 46.1 | | 33.61 | | 43.46 | | 混合char和word, 词典大小为500k | |
| 2016-Neural Headline Generation with Sentence-wise Optimization | 以往模型使用mle来做参数估计，将训练目标限制在了词级别上，且严重依赖训练数据分布。本方法使用最小风险策略，直接在句子级别上优化模型参数。 | | 38.2 | | 25.2 | | 35.4 | |  | |
| 2016-Incorporating Copying Mechanism in Sequence-to-Sequence Learning copynet | seq2seq方法的一个问题：copying，即在句子中，有些词会被多次重复。本文将copying融合到seq2seq学习中 | | 35 | | 22.3 | | 32 | |  | |
|  |  | |  | |  | |  | |  | |
| Gigawords | | | | | | | | | | |
| 标题 | 摘要 | Rouge1 | | Rouge2 | | RougeL | | | | 备注 |
| 2017-Selective Encoding for Abstractive Sentence Summarization seass(beam) | 该模型由三部分组成：句子编码器(RNN)，选择门网络(多层感知机,控制从编码器到解码器的信息流)，注意力对齐解码器 | 36.15 | | 17.54 | | 33.63 | | | |  |
| 2016-Neural Headline Generation with Sentence-wise Optimization | 以往模型使用mle来做参数估计，将训练目标限制在了词级别上，且严重依赖训练数据分布。本方法使用最小风险策略，直接在句子级别上优化模型参数。 | 36.54 | | 16.59 | | 33.44 | | | |  |
| 2016-Abstractive Text Summarization using Sequence-to-sequence RNNs and Beyond | 使用带注意力机制encoder-decoder模型，encoder和decoder为rnn | 35.3 | | 16.64 | | 32.62 | | | |  |
| 2016-Abstractive Sentence Summarization with Attentive Recurrent Neural Networks | 条件rnn，条件由带注意力机制的卷积编码器构成 | 33.78 | | 15.97 | | 31.15 | | | |  |
| 2015-A Neural Attention Model for Abstractive Sentence Summarization abs |  | 31 | | 12.65 | | 28.34 | | | |  |
|  |  |  | |  | |  | | | |  |
| DUC2004 | | | | | | | | | | |
| 标题 | 摘要 | Rouge1 | | Rouge2 | | RougeL | | 备注 | | |
| 2017-Selective Encoding for Abstractive Sentence Summarization seass(beam) | 该模型由三部分组成：句子编码器(RNN)，选择门网络(多层感知机,控制从编码器到解码器的信息流)，注意力对齐解码器 | 29.21 | | 9.56 | | 25.51 | |  | | |
| 2016-Neural Headline Generation with Sentence-wise Optimization | 以往模型使用mle来做参数估计，将训练目标限制在了词级别上，且严重依赖训练数据分布。本方法使用最小风险策略，直接在句子级别上优化模型参数。 | 30.41 | | 10.87 | | 26.79 | |  | | |
| 2016-Abstractive Text Summarization using Sequence-to-sequence RNNs and Beyond | 使用带注意力机制encoder-decoder模型，encoder和decoder为rnn | 28.97 | | 9.46 | | 25.24 | |  | | |
| 2016-Abstractive Sentence Summarization with Attentive Recurrent Neural Networks | 条件rnn，条件由带注意力机制的卷积编码器构成 | 28.97 | | 8.26 | | 24.06 | |  | | |
| 2015-A Neural Attention Model for Abstractive Sentence Summarization abs |  | 28.18 | | 8.49 | | 23.81 | |  | | |
|  |  |  | |  | |  | |  | | |
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| cnn/dailymail | | | | | | | |  | | |
| 标题 | 摘要 | Rouge1 | | Rouge2 | | RougeL | | 备注 | | |
| 2016-Abstractive Text Summarization using Sequence-to-sequence RNNs and Beyond | 使用带注意力机制encoder-decoder模型，encoder和decoder为rnn | 35.46 | | 13.3 | | 32.65 | |  | | |
| 2017-Abstractive Document Summarization with a Graph-Based Attentional Neural Mode | 基于图的注意力机制的seq2seq模型 | 38.1 | | 13.9 | | 34 | |  | | |
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| 标题 | 思路 | Rouge |
| 2016-Abstractive Text Summarization using Sequence-to-sequence RNNs and Beyond | 基本的seq2seq+attn，加入了特征POS, NER, TF, IDF | 35.46/13.3/32.65 |
| 2017-Abstractive Document Summarization with a Graph-Based Attentional Neural Mode | 基于图注意力机制的生成式方法，seq2seq+graph attn，使用LSTM | 38.1/13.9/34.0 |
| 2017-Get To The Point: Summarization with Pointer-Generator Networks | Pointer+coverage, LSTM | 39.53/17.28/36.38 |
| 2018-Deep reinforcement learning for extractive document summarization | 强化学习+抽取式方法（RNN+RNN）或者（CNN+RNN） | 39.4/16.2/35.6 |
| 2018-Fast Abstractive Summarization with  Reinforce-Selected Sentence Rewriting | 强化学习，先抽取式选择句子，然后生成式复写，LSTM | 40.88/17.80/38.54 |
| 2018- A DEEP REINFORCED MODEL FOR ABSTRACTIVE SUMMARIZATION | 强化学习+生成式方法+pointer+intra-attn | 41.16/15.75/39.08 |
| 2019- Pretraining-Based Natural Language Generation for Text Summarization | 两阶段，先生成摘要草稿，再使用语言模型进行校正。使用Transfromer | 41.71/19.49/38.79 |
| 2019-HIBERT: Document Level Pre-training of Hierarchical Bidirectional Transformers for Document Summarization | 抽取式方法： Sentence encoder + doc encoder，mask一个句子，并对其进行预测，以进行预训练。根据doc encoder的输出来判断一个句子是否为摘要句。 | 42.37/19.95/38.83 |