Pre-training for Abstractive Summarization

Nowadays, pre-training models are frequently proposed and tend to show impressive power to solve NLP (Natural Language Processing) problems. Referring to published papers, different tasks during the pre-training give various abilities to the model, and pre-training, unlike regular training, is challenging to overfit. To build a pretrained model for text summarizations, a special pre-training task is supposed to be a promising direction.

This project considers methods for constructing abstractive summarization by a pre-training model. Two existing directions for constructing summarization are extractive and abstractive. Due to the limitation of extractive summarization, currently, abstractive summarization is the main research orientation.

We will investigate the effectiveness of different methods for producing abstractive summarization for different articles. We will conduct experiments to determine if our new pre-training tasks are useful. One is selecting important words or sentences to complete pre-training tasks, and the other is choosing significant articles by trained evaluation metric.

The main contributions of this project will be.

- a new pre-training task for a better quality of abstractive summarization;
- an attempt to utilize a trained evaluation metric for improving abstractive presentation skills of generated summarization.

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