



Efficient Domain Adaptation for Abstractive Summarization

Motivation

Abstractive text summarization aims at distilling the essential information from a text to produce a shorter version. Recent abstractive summarization methods are mainly deep learning-based models, which rely on a large amount of data and computational resources. Such data and resources are not always available. In addition, gathering data for new domains is rather expensive and time-consuming.

The goal of this project is to explore and evaluate various domain adaptation approaches for abstractive summarization [1]. We also target finding optimal subnetworks in pre-trained language models for text summarization [2].

Task Description

- Explore and apply state-of-the-art domain adaptation approaches for abstractive summarization
- Explore an efficient fine-tuning method to adapt large pre-trained models to abstractive summarization

Text

Alice and Bob took the train to visit the zoo. They saw a baby giraffe, a lion, and a flock of colorful tropical birds.

Summary

Alice and Bob visited the zoo and saw animals and birds.

References

- [1] Tiezheng Yu, Zihan Liu, and Pascale Fung. AdaptSum: Towards Low-Resource Domain Adaptation for Abstractive Summarization. NAACL 2021. 5892–5904.
- [2] Chen Liang, Simiao Zuo, Minshuo Chen, Haoming Jiang, Xiaodong Liu, Pengcheng He, Tuo Zhao, Weizhu Chen. Super Tickets in Pre-Trained Language Models: From Model Compression to Improving Generalization. ACL 2021.

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Analysis



Programming



Literature



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