1. Motivation

Aspect-level sentiment analysis is a fine-grained task in sentiment analysis, which aims to predict sentiment polarity (i.e., positive, neutral, or negative) of a specific target of a given sentence. Most of the previous methods focus on capturing the context information of words across the sentence related to the target, ignoring the importance of the independent relationship between the opinion words and the target.

We argue that the opinion words are more important in supervising the polarity of the sentence for the given target, that is to say, we can independently consider the importance of the relationship between the target and opinion words.

To address this limitation, we proposed a position-aware hybrid attention network based model which consists of two components, namely opinion attention network and context attention network. The context attention network is used to capture context information between words across sentence with the target, and the opinion attention network is used to incorporate independent relationship between opinion words and the target.

2. Contribution

The main contributions are as follows:

(1) We propose a hybrid attention network to capture the context information between the words across sentence with the target, as well as the independent relationship between the opinion words and the target to obtain more precisely sentiment information of the given target in the sentence.

(2) We conduct several experiments and ablation tests on public laptop and restaurant datasets to validate our model. We will show that our model achieves a stable and effective performance compared with the baseline models.