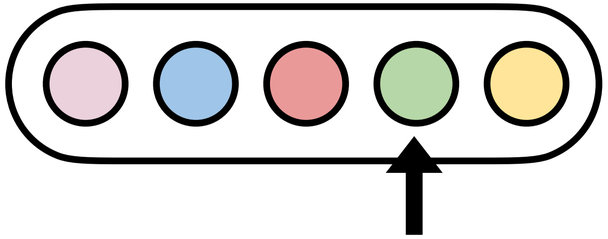
Methodology

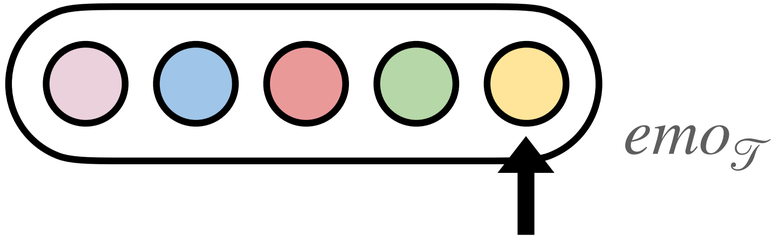
Sentiment Score



- Also consider the coarse-grained sentiment score of the text.
- Usually, the sentiment score is a positive or negative value, which represents the degree of the positive or negative polarity of the whole text.
- It can be calculated by using sentiment dictionaries or public toolkits.
- Then can get sentiment score feature $emo_{\mathcal{T}}^{senti}$.

Methodology

Other Auxiliary Features



- Considering that the above features don't explicitly exploit the information beyond emotion dictionaries.
- Design a set of auxiliary features to capture the emotional signals behind the non-word elements.
- Then can extract the other auxiliary features $emo_{\mathcal{T}}^{aux}$.

Type	Features
Emoticons	The frequency of happy emoticons The frequency of angry emoticons The frequency of surprised emoticons The frequency of sad emoticons The frequency of neutral emoticons
Punctuations	The frequency of exclamation mark The frequency of question mark The frequency of ellipsis mark
Sentimental Words	The frequency of positive sentimental words The frequency of negative sentimental words The frequency of degree words The frequency of negation words
Personal Pronoun	The frequency of pronoun first The frequency of pronoun second The frequency of pronoun third
Others (For English corpus)	The frequency of uppercase letters

Table 1: Auxiliary Feature List