Abstract

Nowadays, with the rapid development and innovation of new technologies, the Internet has become the main driving force of national and even global economic growth, which has greatly enriched people's lives. Millions of users can obtain information, exchange information, express their views and share their experiences, and express various emotions on the Internet. When people want to evaluate something, they often have their subjective emotional tendency, and when people want to make decisions, they usually refer to other people's opinions. From then on, people's lives are more and more affected by the information on the Internet. Therefore, sentiment analysis and applications have become more critical and popular as a branch of Natural Language Processing (NLP).

This thesis studies on the online food delivery platforms that have comprehensive coverage of loyal user groups among many social media platforms. Analyzes the user's emotion behind the text through the massive comments data generated by the on-demand delivery apps and clarifies the user's attitude towards service and orders, which is of positive significance to the improvement and development of providing services. The thesis includes two main parts. The first part summarizes the related work of sentiment analysis and the basic concepts of Deep learning models. The second part experiments the sentiment analysis for the comment data on the online food delivery platforms as the research object to explore its potential user sentiment. We used the deep learning language model to realize the short text sentiment classification task compared with traditional practical analysis.

In addition, this thesis applies the transfer learning technique by using the pre-training BERT model. Then, the fine-tuning process updates the pre-training parameters of the model. Finally, the corresponding online food delivery platforms data set is used to evaluate the performance of the trained model. The results show that the above improvement can achieve classification accuracy in the final sentiment classification stage. It also shows the progress of fine-grained sentiment analysis on online food delivery services, directing further research in this field.

Keywords: Online food delivery, sentiment analysis, natural language processing, BERT model