

Plagiarism Scan Report

Summary

Report Generated Date	27 Oct, 2017
Plagiarism Status	100% Unique
Total Words	623
Total Characters	4061
Any Ignore Url Used	

Content Checked For Plagiarism:

Last part of data preprocessing help to provide deviation from predicted rating with the extraction of adjectives from the review which are scored on a scale of 1 to 5. An overall expected rating associated with the review is calculated. This calculated rating is then compared to the actual rating. The weight of the review is adjusted on the basis of the deviation of the calculated rating from the actual rating.

The preprocessed data from data preprocessor is fed as input to the opinion parser, which is the most important component of system provides output which contain recommendations for users and overall product sentiment (for business). Opinion parsing includes bootstrapping process for aspect extraction. Bootstrapping is an opinion words and opinion target (aspect) extraction process. In this process a set of opinion words like "good", "bad", "amazing", called as Opinion lexicon, is given as an input to the bootstrapper. This Opinion lexicon is used by the bootstrapper to identify opinion words from the reviews.

Fig 3:Opinion Parser

It then extracts corresponding aspects and forms pairs. Known Opinion Lexicon and extracted opinion words and target (aspect) are then used together to further extract opinion words and targets. Subtasks included in this process are extracting targets using opinion words, extracted targets and extracting opinion words using extracted targets and using both the given and the extracted opinion words. This process goes on till no opinion words and target are left to be extracted.

Fig 4: Bootstrapping Using Double Propagation

Other part of opinion parser is sentiment analysis, a block of opinion parser assigns sentiment weights to the aspects. It uses Sentiment Lexicon to identify sentiment weights to the aspects. It uses Sentiment Lexicon to identify sentiment intensity associated with the particular opinion word. Sentiment lexicon is a database of lexical units of a language along with their sentiment orientations. Strengths of these sentiments are averaged to get the overall sentiment for the given aspect

V. Conclusion

In particular, we are aiming to measure how much the ratings have changed for those users who “follow” our recommendations on the test set by mentioning the recommended aspect in the review. In addition to the average rating on the test set, we can compare our results with three strong baseline approaches. These baselines basically indicate the strengths and weaknesses of the establishments based on their user reviews: Trending. Similarly, those users who will not follow our negative recommendations (and experience the negative aspect of an item against our advice) might give higher/lower ratings to the items than the average rating of the items given by all users in the application and those users who did not follow the recommendations provided with the baseline approach. The results are likely to show that managers who “followed” our positive recommendations, obtained higher or lower ratings for the user experiences than the managers who followed recommendations provided with the baseline approaches. The results shall hold not only for the restaurants but also across hotels and beauty domains.

The state-of-the-art approach to enhance the functionality of recommender systems by recommending not only the product itself but also some positive aspects of the product to further enhance user experiences with it. Recommendations of a set of valuable aspects are expected to work well as those users who follow our recommendations must rate their experiences significantly higher than those who follow the baseline recommendations.

The way in which users of the system behave is fundamental in judging the performance of the system. Considering the user profiles and product profiles for recommendation would really assist retaining the aspects of the user-product pairs and being highly relevant in making recommendations and provide even better insights to businesses with the help of product-user association.