Title: From Interests to Opinions: Modelling Subjectivity for Retweeting Analysis on

Twitter

AAAI-14 Submission number: 714

Based on the insightful comments offered by the reviewers of AAAI-14, we have revised our manuscript carefully, which is improved as following:

1. According to the comments of Reviewer #1, we have stated the motivation and significance of our work more clearly in the introduction section. In fact, we have investigated a practical AI problem -why one diffuses information- by modeling the subjectivity of a person with state-of-the-art NLP and data mining techniques. Specially, we have concreted the problem under the context Twitter, but it is applicable to other platforms as well.

As for the retweeting behavior analysis, we have expanded our work by considering three situations (attractiveness, sociality and popularity) a user would retweet a message.

We have also corrected all problems of clarity pointed by the reviewer.

- 2. According to the comments of Reviewer #2, we re-designed the definition of subjectivity similarity measurement. The new calculating method is more efficient and can reflect the intuition of the subjectivity similarity, which is demonstrated in the experiment by giving a significant improvement in the retweeting behavior prediction.
- 3. According to the comments of Reviewer #3, we have cited some topic-sentiment model (TSM and JST model) in the related works, and also pointed their limits under our problem settings. In the definition of subjectivity model section, we declared that our model is a more general model than them in that we represented the opinion as a distribution over a scalable sentiment space, which could catch more fine-grained opinions and distinguish subtle opinion difference. The subjectivity model is more suitable for the diffusion behavior analysis problem and we compared such a model with TSM and JST model in the experiment.