



Utilizing Support Vector Machines in Mining Online Customer Reviews

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Abstract:

As e-commerce is increasingly becoming popular, the number of customer reviews that a product receives grows rapidly. However, for popular products, many online product reviews exist but for other reviews product reviews are very few. These online discussions about particular products may help other online users to make a decision in buying/ not buying those products, like in amazon.com and ebay.com. Since an enormous number of unstructured and ungrammatical reviews on a product exist, opinion mining is getting a crucial research area for better decision making of buying products. In this paper, we apply an opinion mining approach to summarize the unstructured and ungrammatical users' reviews, based on Support Vector Machine (SVM). Two levels of classification is applied: 1)Features classification and 2) Polarity classification for every feature class. Our approach has been tested on Amazon data with dataset of 535 sentences, where a summary is obtained and analysis of precision (93.15%) and recall (92.41%) illustrate the accuracy of the proposed system.

Keywords:

Opinion mining, E-commerce, sentiment analysis, support vector machines, reviews classification, opinion visual summary.

Published In:

Proceedings of 22th International Conference on Computer Theory and Applications ICCTA 2012, Alexandria, Egypt ,
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