

Challenges in Opinion Mining

Since opinion mining is a relatively new field it is facing a lot of challenges along with potential interest. Mainly these challenges are related to the authenticity of the extracted data and the methods used in it. The intellectual challenges are of significance specially to the research community.

Different People Different Writing Style

The fact that comments or views entered by people who are different from each other in the way they write, their use of language, abbreviations and their knowledge is a challenge on its own. People also do not express opinion in the same way. One might use certain negative terms in a sentence Text that appears in an online newspaper and that which appears in an online forum is widely different.

Opinions Change with Time

Another challenge lies in the issue of being able to monitor how opinions change over time. Mood of a certain person can change but that does not necessarily mean that the opinion about a certain product or service will change as well. If a product improves after some time it could be because more people are now satisfied with it and that they could have been convinced after a long discussion in a forum about the product.

Strength of Opinions

Identification of the strength of an opinion is another challenge faced in opinion mining. A strong opinion changed after a certain discussion can be because of some strong arguments used to rationalize a theory. Many attempts have been done to identify factors that determine the strength of an opinion in a context.

Misleading Opinions

Opinion mining can also be misleading specially in sarcastic and ironic context. Some text in a statement can be hard to identify as sarcastic or ironic which can lead to erroneous orientation and misleading opinion mining. In such context a positive word may have a negative meaning in a metaphorical manner.

The Aspect of Positives & Negatives

Similarly classifying an opinion as positive, negative or neutral can be a difficult task in opinion mining. A word could be considered positive in one situation and negative in another situation. This can be difficult to calculate as a sentence can be considered negative because of the use of negative words in it.

An opinion about the type of a product or a product feature may also be misleading for an opinion mining system to judge. For example the word long if used to describe a laptop's battery

life in a way that 'the laptop's battery life was long', it would be considered positive but if it is used in a way that 'the laptop's start up time was long', it would be considered a negative opinion. So word generalization is something difficult to monitor in opinion mining.

Sentences with Mixed Views

A bigger challenge for opinion mining comes when people express positive and negative review in the same sentence. This is mostly the issue when people are communicating through informal mediums like blogs and forums. People are more likely to combine different opinions in the same sentences. Such sentences can be difficult to parse for opinion mining.

Sentiment mining or opinion mining is contrasted generally with the traditional fact-based text mining. Text mining seeks to classify documents by topics while opinion mining generalizes text across many domains and users. Strength of a feeling, degree of positivity and similar factors can be of potential importance in opinion mining.