Abstract

The detection of false or true opinions about a product or service has become nowadays a very important problem. Recent studies show that up to 80 % of people have changed their final decision on the basis of opinions checked on the web. Some of these opinions may be false, positive in order to promote a product/service or negative to discredit it.

To help solving this problem in this thesis is proposed a new method for detection of false opinions, called PU-Learning*, which increases the precision by an iterative algorithm. It also solves the problem of lack of labeled opinions.

To operate the method proposed only a small set of opinions labeled as positive and another large set of opinions unlabeled are needed. From this last set, missing negative opinions are extracted and used to achieve a two classes binary classification. This scenario has become a very common situation in the available corpora.

As a second contribution, we propose a representation based on n-grams of characters. This representation has the advantage of capturing both the content and the writing style, allowing for improving the effectiveness of the proposed method for the detection of false opinions.

The experimental evaluation of the method was carried out by conducting three experiments classification of opinions, using two different collections. The results obtained in each experiment allow seeing the effectiveness of proposed method as well as differences between the use of several types of attributes.

Because the veracity or falsity of the reviews expressed by users becomes a very important parameter in decision making, the method presented here, can be used in any corpus where you have the above characteristics.