Detecting the Spam Review Using Tri-training

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Abstract—Some supervised learning methods were developed to detect spam review and some of them are considerably effective. Some researchers also find that the review spammer consistently produce spam reviews. We observe that the spamming store also consistently produce spam reviews. This provides us two other views to identify review spam: we can identify if the reviewer is spammer and if the store is spamming one. We introduce a three-view semi-supervised method, tri-training, to exploit the large amount of unlabeled data. The experiment results demonstrate that three-view tri-training algorithm can achieve better results than two-view co-training and single-view algorithm.

Keywords—Deceptive reviews, semi-supervised learning, supervised learning, tri-training

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