A Novel Approach for Opinion Spam Detection in E-Commerce

The World Wide Web has brought an enormous improvement in the lives of people, during the last couple of decades. Nowadays, most companies and businesses exploit E-commerce to sell their products and services, to discover the market trend and to analyze their competitor’s activities. Opinion spams are those fake and untruth opinions which target companies or products to fame or defame them.

However, to the best of our knowledge, previous works never considered both behavioural and linguistic features simultaneously. In this paper, we propose an iterative algorithm to detect fake reviews, review spammers and group of spammers at the same time. To accomplish this goal, we propose a new graph structure which considers all the features and entity relationships between reviews and reviewers. Experimental results prove that our algorithm outperforms all the other baseline approaches in terms of accuracy.

Keywords:
Opinion spam, Spam review, Graph-based method, Iterative algorithm

Link to the Paper:
https://www.civilica.com/Paper-ECDC08-ECDC08_087.html