

ONLINE PRODUCT FAKE REVIEWS MONITOR AND DELETION SYSTEM

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Abstract: Now a days online shopping is increasing rapidly. Online shopping makes easy and takes less time. In online shopping, we prefer the products mainly based on the reviews. By reading reviews of the product we decide the quality of product. Even though it is a very good product we may take to prefer because of reviews of the product. So it is very difficult to buy the product in online. One negative review makes the wrong impression on the product. So, it is difficult to find which is fake review and which one is Original.

So, in order to find the fake reviews we proposed Online products Fake review Monitoring and Removal system. This system helps the customers shopping easy and takes less time to read the genuine reviews on the products.

1. INTRODUCTION

Now a days Everyone using E-Commerce websites for shopping because Online shopping takes less time and buy any product we need in our daily lives. But the only problem raises in public who are buying in the online websites is that Negative rating and reviews for the product. Many people are only depending on the reviews and ratings without examining the Original product. If the product is good and quality of the product is also good but if the reviews of the product is negative it impacts on the product and online sales.

In order to find the faux reviews for the good products and quality products we introduced the fake review monitor and deletion system.

This system find out the Spammers who are giving negative ratings and reviews for the same product Through Ip address. The spammer will be blocked and remove by the admin. This system makes efficient and easy to shop in the online websites without any faux reviews

2. LITERATURE SURVEY

2.1 spam and analysis of Nitin Jindal and Bing Liu, (2022). In this research we got the information is that current the research is done on the reading of the reviews and ratings given by the spammers, the customers who are going to buy in online they are deciding the product based on the reviews which are negative. People who are reading the reviews made the decision by reading their comments and also they decide which are positive and negative words and they purchase the products based on the words. So, the spammers are making

negative impact on the good product and they make loss the online shopping .so ,this system is introduced to check the spammers. And theybare permanently removed from the website login credentials.In order to find the spammers and faux reviews we are introduced the system which takes the Ip address of the system and strict login credentials of the person who are willing to buy. And then allows him/her to buy the product from the website and allows them to review the product. From this system we easily findout the spammers and they could not find any faux reviews.

2.2“Fake reviews through supervised classification” (AbhimanyuTya,Santosh , Pankaj Chaudhary),(2021).

Few researches later fake reviews in the social media as increases.In online websites, day by day products and product reviews are increasing .If the product is good and product reviews are negatoive it will be impact on the

Online website owners.so the spammers are increasing day by day. To find out the fake reviews from the spammers we introduced this technique , it tracks the ip address of the user. If the admin gets multiple reviews from the same user ,then admin uses the supervised classification based on the training model with the relavant algorithms ,which classifies and find out the spammers. This ML algorithm helps us to find out the spammers who are reviewing in the negative way.

2. 3 “Fake Review Detection: A Deep Learning Approach” (2018):

We have proposed a deeplearningbased approach for detecting fake reviews on online platforms. Leveraging recurrent neural networks and attention mechanisms, their model effectively captured semantic relationships within review texts. Experimental results demonstrated superiorperformance compared to traditional machine learning methods, showcasing the potential of deep learning in fake review detection.

2.4 "Trustworthiness Assessment of Online Product Reviews Using Supervised Learning" (Li et al., 2019):

Li et al. investigated the use of supervised learning techniques for assessing the trustworthiness of online product reviews. By extracting features from review texts and user behaviors, their model classified reviews as genuine or fake with high accuracy. The study emphasized the importance of considering both textual and behavioral signals in fake review detection highlighting the role of machine learning in improving the reliability of online product feedback systems

2.5 "Adversarial Attacks on Fake Review Detection Systems" (Zhang et al., 2020):

Zhang et al. explored the vulnerability of fake review detection systems to adversarial attacks. They demonstrated various attack strategies aimed at deceiving machine learning models, such as injecting misleading information or manipulating review content. The study underscored the importance of designing robust detection systems capable of withstanding adversarial manipulation, urging researchers to develop countermeasures against emerging threats.

2.6 "Detecting Fake Reviews: A Survey of State-of-the-Art"(Chen et al., 2017):

Chen et al. conducted a comprehensive survey of existing methods for detecting fake reviews on e-commerce platforms. They reviewed techniques based on linguistic features,

behavioral analysis, and machine learning algorithms. The survey highlighted the effectiveness of ML approaches, including support vector machines and DL in identifying the fake reviews. Furthermore, the authors discussed challenges such as data sparsity and adversarial attacks, pointing towards future research directions in this domain.

2.7 "Combating Fake Reviews: An Ensemble Learning Approach"* (Gao et al., 2021):

Gao et al. proposed an ensemble learning framework for combating fake reviews on e-commerce platforms. By combining multiple base classifiers, including decision trees and gradient boosting, their approach achieved improved detection accuracy and robustness. The study highlighted the effectiveness of ensemble methods in integrating diverse sources of information for more reliable fake review detection.

2.8 "Fake Review Detection in Online Product Reviews: A Transfer Learning Perspective"(Hu et al., 2022):

Hu et al. introduced a transfer learning approach for fake review detection, leveraging pre-trained language models such as BERT. By fine-tuning the pre-trained model on domain-specific review data, their method achieved significant improvements in detection performance and generalization ability. The study emphasized the importance of leveraging transfer learning techniques to address data scarcity and domain shift challenges in fake review detection.

3. EXISTING SYSTEM

Most of the people prefer only online websites for shopping .Online shopping makes easy and Takes less time. Most of the people only buy their products by reading the reviews and ratings of the product. If the product is good and quality of the product is also Good the reviews will be negative. If the Reviews are negative people would not like to prefer those products. Most of us it is difficult to find the which review is faux and which is real. Most of the spammers, who want to give negative impact on the online website they are likely to do the negative reviews. It will be impact on the online shopping owners and Customers who are likely to buy those products.

Disadvantages:

- 1.This System is Unable to catch the Spammer Who are giving negative ratings.
- 2.This system is unable to find who are giving Multiple ratings.
- 3.This System will not find the Ip address of Customer.
- 4.This System can't find who are giving negative rating and who are giving positive.
- 5.This System Unable to find the Multiple logins through the same Ip address.

4. PROBLEM STATEMENT

The problem statement for an online product fake review monitor and deletion system typically involves several points.

Identification of Fake Reviews: The system needs to accurately identify fake or fraudulent reviews among the vast amount of user-generated content. This involves detecting patterns such as excessive positive language, repeated phrases, or suspicious reviewer behavior.

Scalability: The system must be capable of handling a large volume of reviews across various products and platforms, ensuring that it can effectively monitor and process reviews in real-time or with minimal delay.

Accuracy: It's crucial for the system to minimize false positives and negatives to maintain the credibility of genuine reviews while removing fake ones. This requires robust algorithms and continuous refinement based on feedback and new patterns of fraudulent behavior.

Automation: To efficiently manage the influx of reviews, the system should automate the monitoring and deletion process as much as possible, reducing the need for manual intervention while still allowing human oversight for complex cases.

Adaptability: As tactics used by fraudulent reviewers evolve, the system should be adaptable to detect new patterns and techniques for generating fake reviews. This may involve machine learning models trained on labeled datasets and continuous monitoring for emerging trends.

Integration: The system should seamlessly integrate with various e-commerce platforms, review websites, and social media channels to provide comprehensive coverage and ensure that fake reviews are identified and removed across different online environments.

Transparency and Accountability: Users and stakeholders should have transparency into the review monitoring and deletion process, including clear communication about why reviews were flagged or removed. Additionally, there should be mechanisms in place to address appeals or disputes regarding the removal of reviews.

Addressing these aspects ensures the development of a robust and effective online product fake review monitor and deletion system that fosters trust and authenticity in online reviews.

5. PROPOSED SYSTEM:

In this project, we are going to propose the system Fake Review Monitor and Deletion System. In this system, The Admin is going to Monitor the whole System. Most of the people are depending on the reviews. And we are unable to find the faux reviews which are given by the Spammers. In order to find the Spammers who are posting faux reviews . By this System we are going find the Spammers who are giving Multiple ratings and reviews. In this System, The Admin is going to Monitor All the products in the system. And the products are also uploaded by the Admin. Who ever want to login to the System, they should provide the valid Login credentials. After providing the login credentials then they would be open the Home page of the website and The customer who want to buy the product they can buy the product and given access to provide the review or rating for that particular product. The customer Ip address is noted by the Admin. If any one is try to login Multiple times and Multiple reviews through the same Ip address that is detected as faux review. And that spammer would be remove by the Admin. By the, Help of Ip address we can find the spammer. And this system helps the users by only the genuine reviews and ratings and makes customers shopping easy and more efficient to find the spammers.

6. CONCLUSION:




This proposed system helps the people to shop easily in the online websites. Because, this system is very much useful for the people who are willing to buy in online. This system makes understanding of the positive and negative reviews and the ratings, mainly this system is used to track the spammers through the Ip addresses thus it prevents the negative ratings and reviews from the spammers. The major advantage is that easy to implement and its

system efficiency .people can easily shop without any faux reviews given by the spammers. The system administrator also easily could find the spammer through the Ip address of the system.Hence, this system makes people to buy in online and also increases the online sales.

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