

Securing Online Review Platforms: An Anomaly Detection Framework Using Advanced Machine-Learning

Key Contribution

This study is expected to benefit researchers and stakeholders involved in the online review and response process. Understanding anomaly detection methods regarding the automated response behaviors of business owners can help companies such as Yelp and other online platforms increase their credibility from both an owner's and a consumer's perspective. This research will also give consumers more confidence that the responses they receive are genuine, enabling them to make more informed decisions online. And finally, as noted above, business owners stand to increase their own credibility and brand reputation by better understanding the potentially damaging effects of ineffectively responding to online reviews.

Research Questions

We intend to answer the following specific research questions.

- What are the common types of anomalies (domain-specific or domain-independent) in business owners' responses to consumers' reviews?
- What types of joint behavior can we exploit to detect anomalies in the context of business owners responses?
- What types of Machine-Learning models can we develop to encode these joint dependencies?
- What type of advanced Text Mining and Analytics models can

we develop for anomaly detection in online responses?