

Towards Reliable E-Commerce: Fake Review Detection with SVM

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Abstract: *In the digital era, online product reviews significantly influence consumer purchasing decisions. However, the authenticity of these reviews often remains uncertain, making it difficult for users to distinguish between genuine and fake feedback. Detecting fake reviews has therefore become essential to assist users in making informed choices. Existing research has explored techniques such as opinion mining, sentiment analysis, data mining, and ontology, yet no single method fully addresses the challenges involved. This paper proposes FakeOut, a web-based application designed to detect fake gadget reviews. The system employs Support Vector Machine (SVM) for review classification, with training data sourced from Kaggle and test data obtained via web scraping from Amazon. Users can either enter a gadget name/URL to analyze multiple reviews or input a single review for verification. Pre-processing techniques are applied before classification to enhance accuracy. The proposed system demonstrates that SVM can effectively identify fake reviews, thereby improving user confidence in product evaluation.*

Keywords: SVM, Machine Learning, Fake reviews

