

# Survey on Various Tool for Analyzing and Detecting Fake Review by using AI

Dr. Umesh B. Pawar<sup>1</sup>, Prof. Daund Ramesh P.<sup>2</sup>, Prof. Ravindra Pandit B.<sup>3</sup>, Ms. Thombare Nayna S<sup>4</sup>

Professor and Head Department of Computer Engineering<sup>1</sup>

PG Coordinator & System Admin Department of Computer Engineering<sup>2</sup>

Asst. Professor, Department of Computer Engineering<sup>3</sup>

PG - Computer engineering Student, Department of Computer Engineering<sup>4</sup>

SND College of Engineering & Research Center, Yeola, Nashik, MS, India

umesh.pawar@sndcoe.ac.in, ramesh.daund@sndcoe.ac.in,

ravindra.pandit@sndcoe.ac.in, nayanathombare29@gmail.com

**Abstract:** *The prevalence of fake product reviews in online shopping platforms has raised concerns regarding the authenticity and reliability of customer feedback. This study proposes a method for detecting fake reviews using a logistic regression model and review-centric features. By analyzing linguistic patterns, sentiment analysis, and reviewer behavior, the proposed model aims to accurately differentiate between genuine and fake reviews. Experimental evaluations on real-world datasets demonstrate an overall accuracy of 82%, showcasing the effectiveness of the approach. The integration of natural language processing techniques allows for the extraction of important features from review texts, which are then utilized as inputs to the logistic regression model. Additionally, considering reviewer behavior, such as the number of reviews, consistency of ratings, and timing, enhances the accuracy of the detection system. The proposed method offers a scalable solution that can be easily implemented in existing e-commerce platforms, bolstering their credibility and protecting consumers from misleading information. By filtering out fake reviews, this approach empowers users to make informed purchasing decisions, ultimately improving customer satisfaction in the online marketplace*

**Keywords:** logistic regression classifier, detection, web scrapping. Fake reviews, feature extraction, review sentiment

## REFERENCES

- [1] Systematic Review of Deepfake Detection Literature MD BEDDHU MURALI<sup>2</sup> SHOHEL RANA<sup>1,2</sup>, (Member, IEEE), MOHAMMAD NUR NOBI<sup>3</sup>, (Member, IEEE), AND ANDREW H. SUNG<sup>2</sup>, (Member, IEEE) date of publication February 24, 2022, Received January 25, 2022, accepted February 16, 2022, date of current version March 10, 2022
- [2] Generating and identifying fraudulent reviews for online products. Chandrashekhar Kandpal, Joni Salminen a,b,\* c, Ahmed Mohamed Kamel d, , Bernard J. Jansen a, Soon-gyo Jung a a Qatar Computing Research Institute, Hamad Bin Khalifa University, Doha, Qatar Turki School of Economics at the University of Turku, Turku, Finland Jaypee Institute of Information Technology, Noida, India Cairo University, Cairo, Egypt Source Journal: Journal of Retailing and Consumer Services
- [3] Date of publication April 26, 2021 Received April 1, 2021, accepted April 21, 2021, date of current version May 6, 2021. Digital Object Identifier 10.1109/ACCESS.2021.3075573 Fake Reviews Detection: A Survey ROBERT OLLINGTON<sup>1</sup> RAMI MOHAWESH<sup>1</sup>, SHUXIANG XU<sup>1</sup>, MATTHEW SPRINGER<sup>1</sup>, YASER JARARWEH<sup>2</sup>, AND SUMBAL MAQSOODI<sup>1</sup>, SON N. TRAN<sup>1</sup>
- [4] Date of current version March 10, 2022. Received January 17, 2022, accepted February 10, 2022, date of publication February 18, 2022, Digital Object Identifier 10.1109/ACCESS.2022.3152806 The Effect of Identifying Inauthentic Reviews in E-commerce Amidst and Post Covid-19: Detection Using SKL-Based Approaches for Fake Reviews M. USMAN ASHRAF, KHALID ALSUBHI, HINA TUFAIL, AND HANI MOAITEQ ALJAHDALI<sup>4</sup>

- [5] Hina Tufail, M. Usman Ashraf, Khalid Alsubhi, Hani Moaiteq Aljahdali. "The Effect of Fake Reviews on e-Commerce During and After Covid-19 Pandemic: SKL-Based Fake Reviews Detection" , IEEE Access, 2022 International Journal & Research Paper Publisher | IJRASET
- [6] Meiling Liu, Yue Shang, Qi Yue, Jiyun Zhou. "Detecting Fake Reviews Using Multidimensional Representations With FineGrained Aspects Plan" , IEEE Access, 2021
- [7] awar, U.B., Bhirud, S.G., Kolhe, S.R. (2020). Light Scattering Study on Protocols and Simulators Used in Automotive Application(s). In: Iyer, B., Deshpande, P., Sharma, S., Shiurkar, U. (eds) Computing in Engineering and Technology. Advances in Intelligent Systems and Computing, vol 1025. Springer, Singapore. [https://doi.org/10.1007/978-981-32-9515-5\\_16](https://doi.org/10.1007/978-981-32-9515-5_16)