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# Social Media Fake Account Identification Using Machine Learning

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**Abstract:** The proliferation of social media platforms has led to an increase in the creation of fake accounts. These accounts are used for various malicious activities, such as spreading false information, phishing, and identity theft. As a result, there is a growing need for effective methods to identify and eliminate fake accounts. This paper proposes a machine learning-based approach for social media fake account identification. The proposed method involves pre-processing the data, feature extraction, and training a classifier using various machine learning algorithms. The performance of the proposed method is evaluated using a publicly available dataset and compared with existing methods. The results demonstrate the effectiveness of the proposed approach in identifying fake accounts with high accuracy and low false positive rates.

**Keywords:** Support vector machines (SVM), K-Nearest Neighbors Algorithm (KNN), Random forest, Logistic Regression & Artificial Neural Network(ANN), Python

#### REFERENCES

- Latha P, Sumitra V,"Fake Profile Identification in Social Network using Machine Learning and NLP", 2022 International Conference on Communication, Computing and Internet of Things (IC3IoT) | 978-1-6654-7995-0/22/\$31.00 ©2022 IEEE | DOI: 10.1109/IC3IOT53935.2022.9767958, 978-1-6654-7995-0/22/\$31.00
  ©2022 IEEE
- [2]. T.Sudhakar, Bhuvana Chendrica Gogineni," FAKE PROFILE IDENTIFICATION USING
- [3]. MACHINE LEARNING", 2022 IEEE International Women in Engineering (WIE) Conference on Electrical and Computer Engineering (WIECON-ECE),979-8-3503-1156-3/22/\$31.00 c2022 IEEE
- [4]. Kotra Shreya, Amith Kothapelly," Identification of Fake accounts in social media using machine learning", 2022 Fourth International Conference on Emerging Research in Electronics, Computer Science and Technology (ICERECT), 978-1-6654-5635-7/22/\$31.00 ©2022 IEEE
- [5]. Nazir, Atif, Saqib Raza, Chen-Nee Chuah, Burkhard Schipper, and C. A. Davis. "Ghostbusting Facebook:Detecting and Characterizing Phantom Profiles in Online Social Gaming Applications." In WOSN. 2010.
- [6]. Adikari, Shalinda, and Kaushik Dutta. "Identifying Fake Profiles in LinkedIn." In PACIS, p. 278. 2014.
- [7]. Chu, Zi, Steven Gianvecchio, Haining Wang, and Sushil Jajodia. "Who is tweeting on Twitter: human, bot, or cyborg?." In Proceedings of the 26th annual computer security applications conference, pp. 21- 30. ACM, 2010.
- [8]. Stringhini, Gianluca, Gang Wang, Manuel Egele, Christopher Kruegel, Giovanni Vigna, Haitao Zheng, and Ben Y. Zhao. "Follow the green: growth and dynamics in twitter follower markets." In Proceedings of the 2013 conference on Internet measurement conference, pp. 163-176. ACM, 2013.
- [9]. Yeh-Cheng chen and ShystunfelixWu,Fake Buster: A Robust fake Account detection by Activity Analysis,2018
- [10]. Sk.Shama, K.Siva Nandini, P.Bhavya Anjali, K. Devi Manaswi, Fake Profile.Identification in Online Social Network, 2019

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#### Volume 3, Issue 1, December 2023

- [11]. Faiza Masood, Ghana Ammad, Ahmad Almogren, Assad Abbas, Hasan Ali Khathak, Ikram Uddin, MohsenGuizani, and Mansour Zuair, Spammer Detection and fake Profile Identification on Social Network, 2019.
- [12]. Malicious Account Detection on Twitter Based on Tweet Account Features using Machine Learning.

