

Recognition of Spurious Profile using Machine Language

S. Jeyaganesh, S. Lokesh, VK. Sudharsan

Students, Department of Electronics and Communication Engineering
Dhanalakshmi College of Engineering, Chennai

***Abstract:** In the present generation, the social life of everyone has become associated with online social networks. These sites have made a drastic change in the way we pursue our social life. Making friends and keeping in contact with them and their updates has become easier. But with their rapid growth, many problems like fake profiles, online impersonation have also grown. There are no feasible solutions exist to control these problems. In this paper, I came up with a framework with which the automatic identification of fake profiles is possible and is efficient. This framework uses classification techniques like Random Forest Classifier to classify the profiles into fake or genuine classes. As this is an automatic detection method, it can be applied easily by online social networks that have millions of profiles whose profiles cannot be examined manually. Nowadays, mobile operators in China mainland are facing fierce competition from one to another, and their focus of customer competition has, in general, shifted from public to corporate customers. One big challenge in corporate customer management is how to identify fake corporate members and potential corporate members from corporate customers. In this study, we have proposed an identification method that combines the rule-based and probabilistic methods. Through this method, fake corporate members can be eliminated and external potential members can be mined. The experimental results based on the data obtained from a local mobile operator revealed that the proposed method can effectively and efficiently identify fake and potential corporate members. The proposed method can be used to improve the management of corporate customers. To avoid the spam message, malicious and cyber bullies activities which are mostly done by the fake profile. These activities challenge the privacy policies of the social network communities. These fake profiles are responsible for spread false information on social communities. To identify the fake profile, duplicate, spam and bots account there is much research work done in this area. By using a machine-learning algorithm, most of the fake accounts detected successfully. This paper represents the review of Fake Profile Detection on Social Site by Using Machine Learn.*

Keywords: machine learning

I. INTRODUCTION

Social networking site is a website where each user has a profile and can keep in contact with friends, share their updates, meet new people who have the same interests. These Online Social Networks (OSN) use web2.0 technology, which allows users to interact with each other. Social networking sites are growing rapidly and changing the way people keep in contact with each other. The online communities bring people with the same interests together which makes users easier to make new friends. The market of corporate customers has an important strategic position . First, in the communication service market, the basic communication products provided by various operators appear to be similar and yield meagre profits, even resulting in a market with low price competition. At the same time, the market growth of personal mobiles in China mainland has been slowing down. Therefore, it is necessary to strategically mine the market for industrial applications. Second, the prosperous avenues of corporate applications reveal that serving corporate customers can be important drivers for mobile operators that are looking to transform from mobile communication experts to mobile information experts. Third, the national information strategy requires mobile operators to comply with the demands of both the government and market by developing corporate information technology solutions. Finally, the considerable size and consumption level of corporate customers can yield generous

profits to mobile operators. However, mobile operators are facing a big challenge in managing corporate customers. This challenge lies in identifying fake corporate members from potential corporate members. Fake corporate members refer to users who are supposedly related to a particular corporate customer, but do not actually belong to the corporation itself. Fake members join the plan of a corporate customer for reaping certain benefits. For example, an actual corporate member's friends or relatives join the corporate plan to reduce the cost of communication and enjoy certain corporate privileges. The potential corporate members refer to users who are the actual staff of the corporation and are closely linked to the other members of the corporation; however, they do not join the corporate plan for certain reasons including the fact that they are enjoying the services provided by another operator. If this problem of identifying fake and potential corporate members cannot be resolved, it will become extremely difficult for mobile operators to effectively manage corporate customers. First, because of the existence of fake and potential members, mobile operators are unable to obtain information on the actual size of their corporate customer base; this information is imperative for estimating the market share of corporate customers and evaluating the performance of one-to-one corporate customer managers. Second, due to the existence of fake members and the absence of potential members, mobile operators cannot effectively analyse the behaviour of corporate customers and fail to understand their actual requirements; furthermore, mobile operators cannot design targeted products and services. Third, the operators incur certain unnecessary costs because of fake customers when the potential customers should be the pertinent source of profits for the operator. Consequently, it has become extremely important to identify fake and potential corporate customers. For the identification of fake and potential corporate members, the following two main methods are often used in practice: rule-based and probabilistic methods. The rule-based method uses a rule extraction model to combine the qualitative understanding of customer behaviour and quantitative data analysis to obtain the decision rules that distinguish fake customers from potential ones.

II. EXISTING SYSTEM

One of the easiest ways to determine that a Facebook account is fake is by examining the photo. It's often the case that fake accounts use a profile photo that they've downloaded from somewhere else online. just fire up Google Image search, then download the profile photo from the Facebook page that you suspect is fake. Drag and drop that photo into the Google Image Search bar and click the Search button. If the photo is from a fake Facebook account, you should see loads of matches all across cyberspace

III. PROPOSED SYSTEM

The proposed Fake Profile Detection system aims to find the fake profiles in OSN based on machine learning technologies that are highly employed. Algorithm has been developed in order to detect the fake profile based on friends list. Here we can find out the fake profiles before we or anyone suffer by the suspicious account. The proposed work aims to find the fake profiles in OSN based on machine learning technologies that are highly employed. Algorithm has been developed in order to detect the fake profile based on friends list. To find out the fake profiles before we or anyone suffer by the suspicious account. Using the users followers based on that we can find the profile is genuine or fake. We consider more number of attributes to find the profiles. Comparisons of algorithms helps to increase the accuracy of the result. We consider more number of attributes to find the profiles. Comparisons of algorithms helps to increase the accuracy of the result. Prediction happens based on training data which we give. The training data considers more real time old fake users. We took more number of data compare to previous methods. We are using python language for the project to improve efficiency of the code and decrease the line of code.

IV. CONCEPT AND TECHNOLOGIES

1. Algorithm has been developed in order to predict the success rate of a specific movie. Here we can find out review of the new movie before releasing.

In today's world, the social life of people has close connection with the social networking Sites, for example, Facebook, Twitter and LinkedIn. Most of the social networks have weak user authentication technique, which mainly depends on fundamental details such as displayed user name and photo. Fake or unauthorized users abuse the authorized users' details such as name, text messages, photographs and videos with or without the approved user's consent. Profile

cloning is a major security problem in social networks as it creates a profile which is homogeneous or similar to the existing ones.

2. Analysis and detection of fake profile over social network

Latest developments have seen exponential increase in clientele of social networks. Facebook has 1.5 billion users. More than 10 million likes and shares are executed daily. Many other networks like 'LinkedIn', 'Instagram', 'Pinterest', 'Twitter' etc. are fast growing. Growth of social networks has given rise to a very high number of fake user profiles created out of ulterior motives. Fake profiles are also known as Sybil's or social Bots. Many such profiles try and befriend the benign users with an ultimate aim of gaining access to privileged information.

3. Understanding User Profiles on Social Media for Fake News Detection

Consuming news from social media is becoming increasingly popular nowadays. Social media brings benefits to users due to the inherent nature of fast dissemination, cheap cost, and easy access. However, the quality of news is considered lower than traditional news outlets, resulting in large amounts of fake news. Detecting fake news becomes very important and is attracting increasing attention due to the detrimental effects on individuals and the society.

4. Analyzing Real and Fake users in Facebook Network based on Emotions

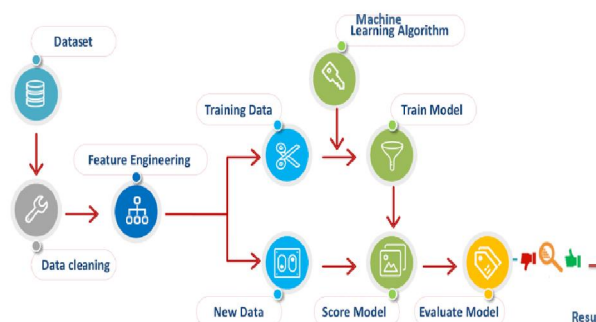
Fake profile detection is one of the critical problems in Online Social Networks (OSNs). So far, studies have mainly focused on profile-based, behavioral-based, network-based and content-based attributes. However, user sentiments have not been explored along this domain. In the present study, we proposed the fake profile detection model that incorporates sentiment-based attributes to differentiate real and fake OSN profiles.

5. Detection of Fake Profile in Online Social Networks Using Machine Learning

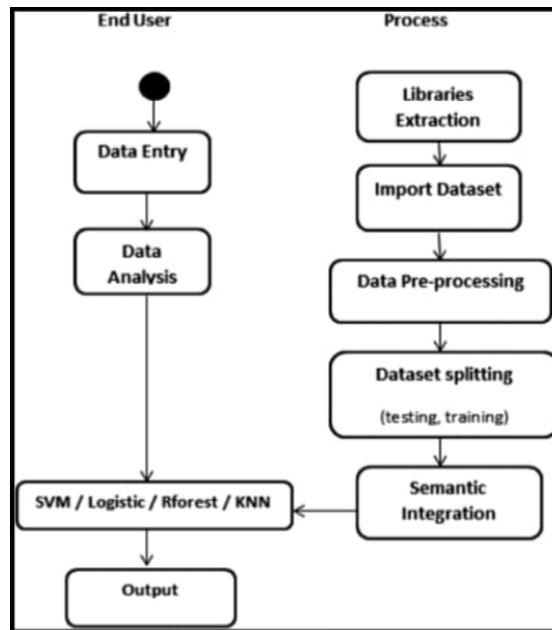
In today's world, the social media platforms are being used on daily basis and has become an important part of our lives. The number of peoples on social media platforms are incrementing at a greater level for malicious use. There are numerous cases where produced accounts have been effectively distinguished utilizing machine adapting techniques however the amount of research work is very low to recognize counterfeit characters made by people. For bots the ML models used various features to calculate the no. of followers to the no. of friends that an account has on social media platforms.

V. ARCHITECTURE

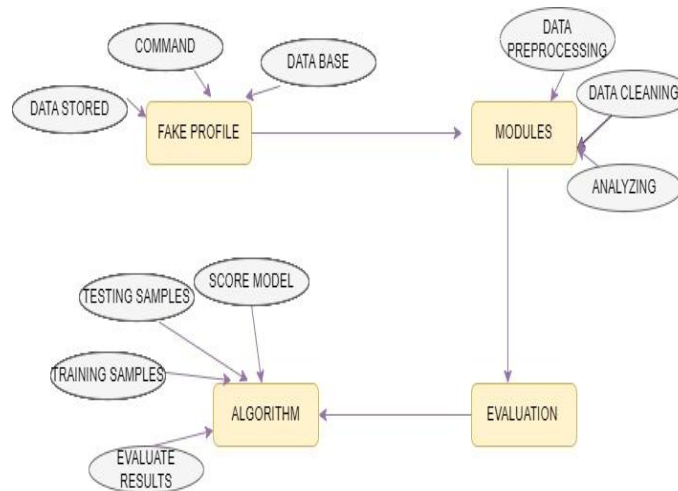
Design is a multi- step that focuses on data structure software architecture, procedural details, procedure etc... and interface among modules. The design procedure also decodes the requirements into presentation of software that can be accessed for excellence before coding begins. Computer software design change continuously as novel methods; improved analysis and border understanding evolved. Software proposal is at relatively primary stage in its revolution. Therefore, software design methodology lacks the depth, flexibility and quantitative nature that are usually associated with more conventional engineering disciplines. However, methods for software designs do exist, criteria for design qualities are existing and design notation can be applied



VI. FLOW DIAGRAM



VII. ER DIAGRAM



VIII. CONCLUSION

We have given a framework using which we can identify fake profiles in any online social network by using Random Forest Classifier with a very high efficiency as high as around 95%. Fake profile Identification can be improved by applying NLP techniques and Neural Networks to process the posts and the profiles. In the future, we wish to classify profiles by taking profile pictures as one of the features. The model presented in this project demonstrates that Support Vector Machine (SVM) is an elegant and robust method for binary classification in a large dataset. Regardless of the non-linearity of the decision boundary, SVM is able to classify between fake and genuine profiles with a reasonable degree of accuracy (>90%).

ACKNOWLEDGMENT

The authors express their gratitude to the Department of Electronics and Communication Engineering at DCE for their support. We would like to thank our guide and coguide for their invaluable guidance, without which this paper would

not have been possible. Their valuable advice and insight helped us accomplish the objectives of this paper. We would also like to extend our appreciation to the Head of the Department of Electronics and Communication Engineering for her constant encouragement and support. We would also like to acknowledge the support and encouragement of our colleagues, who assisted us in correcting errors and ensuring that the paper met the necessary standards. Their contributions were instrumental in the success of this paper, and we are grateful for their assistance...

REFERENCES

- [1] (2016). PhishMe Q1 2016 Malware Review. [Online]. Available: <https://phishme.com/project/phishme-q1-2016-malware-review/>
- [2] A. Belabed, E. Aimeur, and A. Chikh, "A personalized whitelist approach for phishing webpage detection," in Proc. 7th Int. Conf. Availability, Rel. Security (ARES), Aug. 2012, pp. 249–254.
- [3] Y. Cao, W. Han, and Y. Le, "Anti-phishing based on automated individual white-list," in Proc. 4th ACM Workshop Digit. Identity Manage., 2008, pp. 51–60.
- [4] T.-C. Chen, S. Dick, and J. Miller, "Detecting visually similar Web pages: Application to phishing detection," ACM Trans. Internet Technol., vol. 10, no. 2, pp. 1–38, May 2010.
- [5] N. Chou, R. Ledesma, Y. Teraguchi, D. Boneh, and J. C. Mitchell, "Clientside defense against Web-based identity theft," in Proc. 11th Annu. Netw. Distrib. Syst. Security Symp. (NDSS), 2004, pp. 1–16
- [6] C. Inc. (Aug. 2016). Couldmark Toolbar. [Online]. Available: <http://www.cloudmark.com/desktop/ie-toolbar>
- [7] J. Corbetta, L. Invernizzi, C. Kruegel, and G. Vigna, "Eyes of a human, eyes of a program: Leveraging different views of the Web for analysis and detection," in Proceedings of Research in Attacks, Intrusions and Defenses (RAID). Gothenburg, Sweden: Springer, 2014.
- [8] X. Deng, G. Huang, and A. Y. Fu, "An antiphishing strategy based on visual similarity assessment," Internet Comput., vol. 10, no. 2, pp. 58–65, 2006.
- [9] Z. Dong, K. Kane, and L. J. Camp, "Phishing in smooth waters: The state of banking certificates in the US," in Proc. Res. Conf. Commun., Inf. Internet Policy (TPRC), 2014, p. 16.

BIOGRAPHIES

- **JEYAGANESH** is currently pursuing a Bachelor of Engineering in Electronics and communication engineering in Dhanalakshmi College of Engineering , chennai affiliated with Anna University
- **LOKESH** is currently pursuing a Bachelor of Engineering in Electronics and communication engineering in Dhanalakshmi College of Engineering, chennai affiliated with Anna University
- **SUDHARSAN** is currently pursuing a Bachelor of Engineering in Electronics and communication engineering in Dhanalakshmi College of Engineering, chennai affiliated with Anna University