**RESEARCH ARTICLE** 

OPEN ACCESS

# **Evaluation Of Accuracy In Smart Phone For User Verification** Using Ml

## Sabbi Jayalakshmi <sup>[1]</sup>, Nirmala Dolai <sup>[2]</sup>, K.Lokeshwar Kaushik Sravan <sup>[3]</sup> Karanam Sandeep <sup>[4]</sup>, Ramdas Kapila<sup>[5]</sup>

Department of Computer Science and Engineering, Nadimpalli satyanarayana raju institute of technology Andhra Pradesh - India

## ABSTRACT

With the increasing number of smartphone penetration, smartphone data that make smartphone smarter, became a top research area, at that position are a good deal of event data which we can use to see coming manners or detect anomalies. The confidentiality confession caused by stolen or lost phones becomes an progressively more difficult problem that cannot be stroke aside. And then here we will use machine learning algorithms to secure our smart phone.

Keywords:- MI, Smart Phone

## I. INTRODUCTION

Today, with the on the increase Internet, smartphones have become more and more usable. It can be theoretical to create videos, submit pictures, contact with friends and so on. Moreover, online expense cannot be feasible without smart phones. If your telephone is misplaced or stolen, the nightmare will soon commence. You will care around your property damage and personal privacy disclosure. With increasing global existence of smartphones, crimes of stealing phones have also been a vast problem. In the United States, there are 113 phone being lost or ripped off every moment. Granting to the U.S. Federal information technology order, at that place are nearly one third of robbery with smartphones involved. In 2012, 1.6 million Americans lost about 30 billion dollars because of smartphone crime. Shockingly, 3 million Americans became victims because of it in 2013.

"How to detect phone stolen?" has become a difficult event. To resolve this problem, the U.S. Government and the Government of Mexico have developed some counteractive. In 2012, a number of communication companies including AT&T joined it and constructed a central database of stolen smartphones. Thereafter, once a mobile phone is reported to be missing and enrolled in the database, it will generate a unique serial number correlated to its hardware. Then the Mobile Operator can block any connection around that bit. Moreover, Apple

and Samsun use a different means to control this matter. They offer a remote permission about transfer the phone's location or set to rights factory setting to erase all data in that phone.

Nevertheless, all those solutions are not well-informed. They all need phone's vendor to react when they find their phone to be slipped. It will generally require a long time until they understand it. We offer a machine learning solution which makes phone itself to detect stolen status. Foremost of all, we estimate users' behavior by applying the data picked up by mobile phone detectors. Later applying the rule mining approach to abstract users' movement behavior, make a massproduced example to find anomalies. In one case we have the model, we also abstract patterns from test data and present scores for these figures, normally within one hour. Therefore, compare the scores to find anomalies.

## II. ALGORITHMS

#### a) LOGISTIC REGRESSION:

A popular statistical technique to predict binomial outcomes (y = 0 or 1) is Logistic Regression. Logistic regression predicts categorical outcomes (binomial / multinomial values of y). The predictions of Logistic Regression (henceforth, LogR in this article) are in the form of probabilities of an event occurring, i.e. the probability of y=1, given certain values of input variables x. Thus, the results of LogR range between 0-1. LogR models the data points using the standard logistic function, which is an S- shaped curve also called as sigmoid curve and is fed by the equation.

#### b) SUPPORT VECTOR MACHINES

"Support Vector Machine" (SVM) is a supervised machine learning algorithm which can be applied for both categorization and regression challenges. Yet, it is generally used in classification problems. In this algorithm, we plot each data point as a point in ndimensional space (where n is the number of features you have) with the value of each feature being the value of a particular coordinate. And so, we perform an arrangement by finding the hyper-plane that separate the two classes very easily (look at the below snapshot). The SVM algorithm is implemented in follow using a kernel. The erudition of the hyperplane in linear SVM is done by translating the problem using some linear algebra, which is out of the reach of this entry to the SVM. A powerful insight is that the linear SVM can be put differently using the interior product of any two given observations, instead than the observations themselves. The inner product between two vectors is the essence of the multiplication of each span of input values. For example, the inner product of the vectors [2, 3] and [5, 6] is 2\*5 + 3\*6 or 28. The equation for making a prediction for a new input using the dot product between the input (x) and each support vector (xi) is calculated as follows:

#### c) RANDOM FOREST

To increase in computational power, we can now choose algorithms which do very intensive calculations. One such algorithm is "Random Forest". Random forest is like bootstrapping algorithm with Decision tree (CART) model. Say, we have 1000 observations in the complete population with 10 variables. Random forest tries to build multiple CART model with different sample and different initial variables. For example, it will select a random sample of 100 clarification and 5 randomly chosen initial variables to build a CART model. It will replicate the process (suppose) 10 times and then realize a final prediction on each notice. Final prediction is a mapping of each prediction. This final prediction can simply be the mean of each prediction.

#### **III. SCREEN SHORTS**



#### Fig 1:HOME PAGE



#### Fig 2: SVM ALGORITHM



#### Fig 3: LOGISTIC ALGORITHM



#### Fig 4: RANDOMALGORITHM

## **IV. DESCRIPTION**

The latest smartphones endow with lots of capability like personal computers and in accumulation it offers unlike forms of appliance which are in employment to store heaps of data in an organized sample Because smart phones are getting smaller in size day-to-day, there is a lot of chance to drop it somewhere and also anyone can steal it without your knowledge. It takes tons of secret documents, data and personal information which will be in peril. Thus it is important to discover the thief, all the existing applications could not be able to identify the thief, it is solely capable of locating the device.

In this application, we introduce a novel scenario of anti-theft by breaking an application which is capable to identify the thief. Imagine that somebody has got hold of your phone, maybe a thief, at present this application operates as follows:

- At one time this application gets installed on your Android mobile device, it will store your email id, alternate mobile number, and SIM unique identity number in the phone memory and continue playing in the ground by using the services.
- Then it will continue checking for SIM number, once a user/thief changes the SIM, it will detect that SIM is changed by comparing new SIM unique numbers with stored one and send the sign to begin services.
- Immediately as before long as signal is received, services are getting initiated in the background which will start making video recording from front camera if present, otherwise from back camera (at least one camera is necessary) and also take 2-3 snapshots, which are stored in the SD card.
- Now at one time these services get finished it will broadcast a signal to another service, where

a service will send an MMS and an electronic mail with attached snaps or video clips to an alternate mobile number and to an email address respectively, once it receives proper setting for multimedia messages and internet connectivity.

• Through this you will make a little clip and some clicks of a thief, who has stolen your handled dove e, at your email address and to your alternate mobile number, which is sufficient to identify the thief and also facilitate the user to see the positioning of the managed device.

## V. CONCLUSION

As Android smartphone is the cheaper smartphone than any other smartphone with easy use in the world, the use of android phone is increasing rapidly. Day by day its popularity is growing so fast. The mobile phone users are now much dependent on android phone because of its versatile functionalities. They can store a lot of data, and private documents. But rate of lost or theft of mobile phone is also increasing. If the phone is lost or stolen by someone, it will be very tender for the mobile phone user. We need to save our data secure. So using this techniques we can secure our data. Our application will further be developed and improved. Currently this application is available for android based mobile phones. However, in future a network based technique can be embedded with the developed to get back our important data

#### REFERENCES

- Reto Meier, Professional Android 2 Application Development, 2<sup>nd</sup> edition Wiley Publishing Inc., 2010.
- [2] J.F. DiMarziio, Android a programmer's Guide, 1<sup>st</sup> edition, McGraw- Hill Companies, 2008.
- [3] Claudio Maia, Lu <sup>3</sup>/<sub>0</sub>s Nogueira, Lu <sup>3</sup>/<sub>0</sub>s Miguel Pinho, "Evaluating Android OS for Embedded Real-Time Systems", CISTER Research Centre, Porto, Portugal, http://www.utdallas.edu/~cxl137330/courses/fall1 3/RTS/papers/4a.pdf
- [4] Google Developer, http://developer.android.com, last accessed on Sep 20, 2013.
- [5] Ed Burnette, Hello, Android: Introducing Google's Mobile Development Platform, 3<sup>rd</sup> edition, Pragmatic Bookshelf, 2010.
- [6] https://android.googlesource.com/, last accessed on Aug 06, 2013.
- [7] Chandra, Ankur, Shashank Jain, and

Mohammed Abdul Qadeer. "GPS Locator: An Application for Location Tracking and Sharing Using GPS for Java Enabled Handhelds." In Computational Intelligence and Communication Networks (CICN), 2011 International Conference on, pp. 406-410. IEEE, 2011.

- [8] Kumar, Sandeep, Mohammed Abdul Qadeer, and Archana Gupta. "Location based services using android." In IMSAA'09: Proceedings of the 3rd IEEE International Conference on Internet Multimedia Services Architecture and Applications, pp. 335-339. 2009.
- [9] Imran, Ale, Mohammed A. Qadeer, and M. Khan. "Asterisk VoIP private branch exchange." In Multimedia, Signal Processing and Communication Technologies, 2009. IMPACT'09. International, pp. 217-220. IEEE, 2009.
- [10] Qadeer, Mohammed Abdul, Ankur Chandra, and Shashank Jain. "Design and Implementation of Location Awareness and Sharing System using GPS and 3G/GPRS." (2012): 125-140.
- [11]Chandra, Ankur, Shashank Jain, and Mohammed Abdul Qadeer. "Implementation of location awareness and sharing system based on GPS and GPRS using J2ME, PHP and MYSQL." In Computer Research and Development (ICCRD), 2011 3rd International Conference on, vol. 1, pp. 216-220. IEEE, 2011.
- [12] Qadeer, Mohammed A., Nadeem Akhtar, Shalini Govil, and Anuja Varshney. "A Novel Scheme for Mobile Payment Using RFID-Enabled Smart SIMcard." In Future Computer and Communication, 2009. ICFCC 2009. International Conference on, pp. 339-343. IEEE, 2009.
- [13]Salim, Mohammad, M. Sana Akhtar, and Mohammed A. Qadeer. "Data Retrieval and Security Using Lightweight Directory Access Protocol." InKnowledge Discovery and Data Mining, 2009. WKDD 2009. Second International Workshop on, pp. 685-688. IEEE, 2009.
- [14] Habeeb, Ahmad Ali, and Mohammed Abdul Qadeer. "Interference evaluation and MS controlled Handoff Technique for FemtoCell." In Internet, 2009. AH-ICI 2009. First Asian Himalayas International Conference on, pp. 1-5. IEEE, 2009.
- [15]Qadeer, Mohammed A., Robin Kasana, and Sarvat Sayeed. "Encrypted voice calls with ip enabled wireless phones over gsm/cdma/wifi networks." In Computer Engineering and Technology, 2009. ICCET'09. International

Conference on, vol. 2, pp. 218-222. IEEE, 2009.

- [16] Qadeer, Mohammed A., Rehan Ahmad, Mohd Siddique Khan, and Tauseef Ahmad. "Real time video streaming over heterogeneous networks." InAdvanced Communication Technology, 2009. ICACT 2009. 11th International Conference on, vol. 2, pp. 1117-1122. IEEE, 2009.
- [17] Habeeb, Ahmad Ali, Mohammed A. Qadeer, and Shamshir Ahmad. "Voice communication over GGSN/SGSN." In Advanced Communication Technology, 2009. ICACT 2009. 11th International Conference on, vol. 1, pp. 682-687. IEEE, 2009.
- [18] Imran, Ale, and Mohammed A. Qadeer. "Conferencing, paging, voice mailing via Asterisk EPBX." In Computer Engineering and Technology, 2009. ICCET'09. International Conference on, vol. 1, pp. 186-190. IEEE, 2009.
- [19]Qadeer, Mohammed A., Robin Kasana, and Sarvat Sayeed. "Encrypted voice calls with ip enabled wireless phones over gsm/cdma/wifi networks." In Computer Engineering and Technology, 2009. ICCET'09. International Conference on, vol. 2, pp. 218-222. IEEE, 2009.
- [20]Shahid, Mohammad, and Mohammed A. Qadeer. "Novel scheme for securing passwords." In Digital Ecosystems and Technologies, 2009. DEST'09. 3rd IEEE International Conference on, pp. 223-227. IEEE, 2009.
- [21]Qadeer, Mohammed Abdul, Kanika Shah, and Utkarsh Goel. "Voice- Video Communication on Mobile Phones and PCs' Using Asterisk EPBX." InCommunication Systems and Network Technologies (CSNT), 2012 International Conference on, pp. 534-538. IEEE, 2012.
- [22] Ansari, Abdullah Mohammad, Md Nehal, and Mohammed Abdul Qadeer. "SIP-based Interactive Voice Response System using FreeSwitch EPBX." InWireless and Optical Communications Networks (WOCN), 2013 Tenth International Conference on, pp. 1-5. IEEE, 2013.
- [23]Gupta, Priyanka, Neha Agrawal, and Mohammed Abdul Qadeer. "GSM and PSTN gateway for asterisk EPBX." In Wireless and Optical Communications Networks (WOCN), 2013 Tenth International Conference on, pp. 1-5. IEEE, 2013.

## International Journal of Computer Science Trends and Technology (IJCST) - Volume 8 Issue 1, Jan - Feb 2020

- [24] Varshney, Abhishek, and Mohammed Abdul Qadeer. "Mobile Peer to Peer Spontaneous and Real-Time Social Networking." In Advances in Computing and Communications, pp. 442-451. Springer Berlin Heidelberg, 2011.
- [25] Deepak Kumar and Mohammed Abdul Qadeer, "SMS Based Emerging Techniques for Monitoring and Controlling Android Mobiles," International Journal of Engineering and Technology vol. 4, no. 6, pp. 798-802,
- [26]Qadeer, Mohammed A., Rahul Agrawal, Amit Singhal, and Sarosh Umar. "Bluetooth enabled mobile phone remote control for PC." In Advanced Computer Control, 2009. ICACC'09. International Conference on, pp. 747-751. IEEE, 2009.
- [27] Qadeer, Mohammed Abdul. "Dynamic call transfer through wi-fi networks using asterisk." In Proceedings of the International Conference on Soft Computing for Problem Solving (SocProS 2011) December 20-22, 2011, pp. 51-61. Springer India, 2012.



Sabbi Jayalakshmi is presently pursuing B.Tech (CSE) Department of Computer Science Engineering from Nadimpalli satyanarayana raju institute of technology.



Nirmala Dolai is presently pursuing B.Tech (CSE) Department of Computer Science Engineering from Nadimpalli satyanarayana raju institute of technology.



K. Lokeshwar kaushik sravan is presently pursuing B.Tech (CSE) Department of Computer Science Engineering from Nadimpalli satyanarayana raju institute of technology.



Karanam Sandeep is presently pursuing B.Tech (CSE) Department of Computer Science Engineering from Nadimpalli satyanarayana raju institute of technology.



Ramdas Kapila, Mtech as an assistant professor in computer science and engineering in Nadimpalli satyanarayana raju institute of technology.