Web Phishing Detection

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ABSTRACT

Web service is one of the key communications software services for the Internet. Web phishing is one of many security threats to web services on the Internet. Web phishing aims to steal private information, such as usernames, passwords, and credit card details, by way of impersonating a legitimate entity. It will lead to information disclosure and property damage. This paper mainly focuses on applying a deep learning framework to detect phishing websites. This paper first designs two types of features for web phishing: original features and interaction features.

LITERATURE SURVEY

Name: Phishing Website Detection using Machine Learning Algorithms

Year: 2018

Authors : Rishikesh Mahajan ,Irfan Siddavatam

About: This paper deals with machine learning technology for detection of phishing URLs by extracting and analyzing various features of legitimate and phishing URLs. Decision Tree, random forest and Support vector machine algorithms are used to detect phishing websites. Aim of the paper is to detect phishing URLs as well as narrow down to best machine learning algorithm by comparing accuracy rate, false positive and false negative rate of each algorithm.

Algorithm: Decision Tree Algorithm, Random forest Algorithm, Support vendior machine Algorithm

Accuracy: 96.17,96.72,96.40

LITERATURE SURVEY

Name: Detection of Phising Websites using Machine Learning Approaches

Year: 2021

Author : Farashazillah Yahya , Ryan Isaac W Mahibol , Chong Kim Ying

About: Phishing websites can be detected using machine learning by classifying the websites into legitimate or illegitimate websites. The purpose of the study is to conduct a mini-review of the existing techniques and implement experiments to detect whether a website is malicious or not. The dataset consists of 11,055 observations and 32 variables. Three supervised learning models are implemented in this study: Decision Tree, K-Nearest Neighbour (KNN), and Random Forest. The three algorithms are chosen because it provides a better understanding and more suitable for the dataset.

Algorithms : Decision Tree, K-Nearest Neighbor ,Random Forest

Accuracy: 91.51,97.69,94.44

LITERATURE SURVEY

Name: Detection of Phishing Websites using Machine Learning

Year: 2022

Author : Anuja Bhosale , Gayatri Gadas , Muskan Chavan

About: Phishing websites that anticipate to take the victim's confidential data by diverting them to surf a fake website page that resembles a sincere to goodness one is some another type of criminal activity through the internet and its one of the especially concerns in numerous areas including e-managing an account and retailing. Detecting phishing sites is a complex and unpredictable process involving numerous variables and criteria that are not stable. Using Extreme Learning Machines, we proposed an intelligent model for detecting phishing web pages.

Algorithms : Random Forest , Linear SVM , SVM polynomial Kernel , SVM Sigmoid Kernel

Accuracy: 97.42, 95.16, 92.65 , 35.83

LITERATURE SURVEY

Name: Phishing Website Detection using Hadoop

Year: 2020

Author : Muhammad Rayhan Natadimadja , Maman Abdurohman , Hilal Hudan Nuha

About : Phishing is an activity carried out by phishers with the aim of stealing personal data of internet users such as user IDs, password, and banking account, that data will be used for their personal interests.
Average internet user will be easily trapped by phishers due to the similarity of the websites they visit to the original websites. Because there are several attributes that must be considered, most of internet user finds it difficult to distinguish between an authentic website or not.

Algorithms : Heuristic , Monte carlo Algorithm , TVD Algorithm

Accuracy: 96.10, 97,71, 99.54

LITERATURE SURVEY

Name: Phishing Website Detection using Machine Learning and Deep learning Techniques

Year: 2021

Author : Selvakumari M , Sowjanya , Sneha Das , Padmavathi S

About : Phishing has become more damaging nowadays because of the rapid growth of internet users. The phishing attack is now a big threat to people's daily life and to the internet environment. In these attacks, the attacker impersonates a trusted entity intending to steal sensitive information or the digital identity of the user, e.g., account credentials, credit card numbers and other user details. A phishing website is a website which is similar in name and appearance to an official website otherwise known as a spoofed website which is created to fool an individual and steal their personal credentials.

Algorithms : Logistic Regression , KNN , Ada Boost , Xg Boost

Accuracy: 79, 93.10, 86.90, 93.40