WEB PISHING DETECTION

LITERACTURE SURVEY

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of phishing attacks. Phishing attacks target vulnerabilities that

exist in systems due to the human factor. Many cyber attacks

are spread via mechanisms that exploit weaknesses found in end-

users, which makes users the weakest element in the security

chain. The phishing problem is broad and no single silver-bullet

solution exists to mitigate all the vulnerabilities effectively, thus

multiple techniques are often implemented to mitigate speciﬁc

attacks. This paper aims at surveying many of the recently

proposed phishing mitigation techniques. A high-level overview

of various categories of phishing mitigation techniques is also

presented, such as: detection, offensive defense, correction, and

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**Authors:** **O. Adam, Y. C. Lee, and A. Y. Zomaya**

**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. A detection model based on Deep Belief Networks (DBN) is then presented. The test using real IP flows from ISP (Internet Service Provider) shows that the detecting model based on DBN can achieve an approximately 90% true positive rate and 0.6% false positive rate.