

## LITERATURE SURVEY

In emerging technology, industry, which deeply influence today's security problems, has given a headache to many employers and home users.

Occurrences that exploit human vulnerabilities have been on the upsurge in recent years. In these new times there are many security systems being enabled to ensure security is given the outmost priority and prevention to be taken from being hacked by those who are involved in cyber-offenses and essential prevention is taken as high importance in organization to ensure network security is not being compromised. Cyber security employee are currently searching for trustworthy and steady detection techniques for phishing websites detection. Due to wide usage of internet to perform various activities such as online bill payment, banking transaction, online shopping, etc. Customer face numerous security threats like cybercrime.

Many cybercrime is being casually executed for example spam, fraud, identity theft cyber terrorisms and phishing. Among this phishing is known as the most common cybercrime today. Phishing has become one amongst the top three most current methods of law breaking in line with recent reports, and both frequency of events and user weakness has increased in recent years, more combination of all these methods result in greater danger of economic damage. Phishing is a social engineering attack that targets and exploiting the weakness found in the system at the user's end. This paper proposes the Agile Unified Process (AUP) to detect duplicate websites that can potentially collect sensitive information about the user. The system checks the blacklisted sites in dataset and learns the patterns followed by the phishing websites and applies it to further given inputs. The system sends a pop-up and an e-mail notification to the user, if the user clicks on a phishing link and redirects to the site if it is a safe website. This system does not support real time detection of phishing sites; user has to supply the website link to the system developed with Microsoft Visual Studio 2010 Ultimate and MySQL stocks up data and to implement database in this system. Phishing costs Internet user's lots of money. It refers to misusing weakness on the user side, which is vulnerable to such attacks.

The basic ideology of the proposed solution is use to all the three-hybrid solution blacklist and whitelist, heuristics and visual similarity. The proposed system carries out a set of procedures before giving out the results. First, it tracks all "http" traffic of client system by creating a browser extension. Then compare domain of each URL with the white list of trusted domains and the blacklist of illegitimate domains. Further various characters in the URL is considered like number of '@', number of '-' and many more. Next approach is to extract and compare CSS of doubtful URL and compare it with the CSS of each of the legitimate domains in queue. This method will look into visual based features of the phished websites and machine learning classifiers such as decision tree, logistic regression, random forest are applied to the collected data, and a score is generated. The match score and similarity score is evaluated. If the score is greater than threshold then the URL marked as phishing and blocked. This approach provides a three level security block. Phishing is a dangerous effort to steal private data from users like address, Aadhar number, PAN card details, credit or debit card details, bank account details, personal details etc.

The various types of phishing attacks like spoofing, instant spam spoofing, Hosts file poisoning, malware-based phishing, Man in-the middle, session hijacking, DNS based phishing, deceptive phishing, key loggers/loggers, Web Trojans, Data theft, Content-injection phishing, Search engine phishing, Email /Spam, Web based delivery, Link Manipulation, System reconfiguration, Phone phishing, etc. are discussed in the paper. The recent approaches to prevent the attacks like heuristics approach, blacklist approach, fuzzy rule-based approach, machine learning approach etc. are also discussed and finally filtering all detection techniques.

based on accuracy and performance proposed a framework to detect and prevent phishing attacks. A combination of supervised and unsupervised machine learning techniques is used to detect malicious attacks