PROPOSED SOLUTION

Now Electronic mail (E-mail) is used by everyone including organizations, agency and becoming official communication for the society as a whole in day to day basis. Even though a lot of modern techniques, tools and prevention methods are being developed to secure the users vital information but still they are prone to security attacks by the fraudsters. Phishing is one such attack and its detection with high accuracy is one of the prominent research issues in the area of cyber security. Phisher fraudulently acquire confidential information like user-id, passwords, visa card and master card details through various social engineering methods. Mostly blacklist based methodology is used for detection of phishing attacks but this method has a limitation that it cannot be used for detection of white listed phishing. This chapter aims to use machine learning algorithms to classify between phishing E-mails and genuine E-mails and helps the user in detecting attacks. The architectural model proposed in this chapter is to identify phishing and use J48 decision tree classifier to classify the fake E-mail from real E-mail. The algorithm presented here goes through several stages to identify phishing attack and helps the user in a great way to protect their vital information. Even though there are several methods exists today to detect phishing but still it has become a very difficult task to detect fake E-mails in the current scenario. Today there are a number of techniques exist for identification of phishing E-mails and some of them are white listing, heuristics, blacklisting and machine learning. A machine learning technique is proposed in this chapter to identify the phishing E-mails and protect the user from revealing their pin, user id and passwords. The objective of this chapter is to use J48 one of the machine learning algorithms to analyze incoming E-mails and helps in preventing the user from phishing attacks. This chapter presented an architectural model as

shown in Figure 1 below and uses the various sub-processes at different stages to classify between fake E-mail and genuine E-mails.