

Detection of Phishing Website using XG – Boost Algorithm

Sridevi Malipatil¹, A S Kruthik², Eldad Nischal³, G S Vinay Kumar⁴, Ajay Kumar H A⁵

Assistant Professor, Computer Science and Engineering¹

Students, Department of Computer Science and Engineering^{2,3,4,5}

Rao Bahadur Y Mahabaleswarappa Engineering College, Ballari, India

Abstract: *Phishing, a cybercriminal's attempted attack, is a social web-engineering attack in which valuable data or personal information might be stolen from either email addresses or websites. There are many methods available to detect phishing, but new ones are being introduced in an attempt to increase detection accuracy and decrease phishing websites success to steal information. Phishing is generally detected using Machine Learning methods with different kinds of algorithms. In this study, our aim is to use Machine Learning to detect phishing websites. We used the data from Kaggle consisting of 86 features and 11,430 total URLs, half of them are phishing and half of them are legitimate. We trained our data using Decision Tree (DT), Random Forest (RF), XGBoost, Multilayer Perceptrons, K-Nearest Neighbors, Naive Bayes, AdaBoost, and Gradient Boosting and reached the highest accuracy of 96.6 using X G Boost.*

Keywords: Machine learning algorithm, HTML, datasets, Decision tree, Random forest, XG Boost, Multilayer perceptrons, K-nearest neighbors, Naïve bayes, AdaBoost, Gradient boosting.