Applying Logistic Regression Approach for detection of Phishing Websites

Abstract :

Phishing attacks are a growing concern in today's digital landscape, with attackers using various. tactics to trick users into revealing sensitive information or installing malware

Traditional methods of detecting phishing websites involve manual inspection and analysis, which can be time-consuming and ineffective against sophisticated attacks.

Machine learning algorithms provide a promising solution to this problem, enabling the automatic detection of phishing websites based on features such as URL structure, content, and behavior.

In this project a machine learning approach to detect phishing websites using a dataset of known phishing and legitimate websites.

We utilize a stochastic gradient ascent algorithm to train a logistic regression model on the dataset. The obtained model is then used to classify new websites as phishing or legitimate. We evaluate the performance of the model using the accuracy metrics where an accuracy of 91.89% has been obtained.