

## WEB PHISHING DETECTION

### PROBLEM STATEMENT

1. Phishing detection techniques do suffer low detection accuracy and high false alarm especially when novel phishing approaches are introduced. Besides, the most common technique used, blacklist-based method is inefficient in responding to emanating phishing attacks since registering new domain has become easier, no comprehensive blacklist can ensure a perfect up-to-date database. Furthermore, page content inspection has been used by some strategies to overcome the false negative problems and complement the vulnerabilities of the stale lists. Moreover, page content inspection algorithms each have different approach to phishing detection with varying degrees of accuracy.
2. Malicious links will lead to a website that often steals login credentials or financial information like credit card numbers. Attachments from phishing emails can contain malware that once opened can leave the door open to the attacker to perform malicious behavior from the user's computer.
3. Phishing attacks are growing in the similar manner as e-commerce industries are growing. Prediction and prevention of phishing attacks is a very critical step towards safeguarding online transactions. Data mining tools can be applied in this regard as the technique is very easy and can mine millions of information within seconds and deliver accurate results. With the help of machine learning algorithms like, Random Forest, Decision Tree, Neural network and Linear model we can classify data into phishing, suspicious and legitimate.
4. Hackers are increasingly launching phishing attacks via SMS and social media. Games and dating apps introduce yet another attack vector. However, current deep learning-based phishing detection applications are not applicable to mobile devices due to the computational burden.

