

# **Hazard Identification and Detection Using Machine Learning Approach**

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**Abstract:** *Internet surfing has become a vital part of our daily life. So to catch the attention of the users' different browser vendors compete to set up the new functionality and advanced features that become the source of attacks for the intruder and the websites are put at hazard. However, the existing approaches are not adequate to protect the surfers which require an expeditious and precise model that can be able to distinguish between the benign or malicious webpages. In this research article, we design a new classification system to analyze and detect the malicious web pages using machine learning classifiers such as, random forest, support vector machine, naïve Bayes, logistic regression and Some special URL (Uniform Resource Locator) based on extricated features the classifiers are trained to predict the malicious web pages. The experimental results have shown that the performance of the random forest classifier achieves better accuracy of 95% in comparison to other machine learning classifiers*

**Keywords:** malicious web page, machine learning, detection, URL, malicious websites