

# **MACHINE LEARNING IN CYBER SECURITY**

Machine learning is a type of artificial intelligence (AI) that provides computers with the ability to learn without being explicitly programmed. Machine learning focuses on the development of computer programs that can change when exposed to new data. Machine Learning in Cyber Security Domain; In recent years, attackers have been developing more sophisticated ways to attack systems. Thus, recognizing these attacks is getting more complicated in time. Most of the time, network administrators were not capable to recognize these attacks effectively or response quickly.

To overcome attacking problems, threats or other issues, different types of classification algorithms and regression algorithms have been introduced. Few of which are, SVM (Support vector Machine), RFC (Random Forest Classifier), DTC (Decision Tree Classifier) and so on.

## **CASE STUDY**

My main objective of this study is to construct a real-time system that uses machine learning techniques to **DETECT MALICIOUS URLS'** (spam, phishing, exploits, and so on)