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(57) Abstract :
Distributed network attacks are referred to, usually, as Distributed Denial of Service(DDoS) attacks. These attacks take advantage of specific limitations that apply to anyarrangement asset, such as the framework of the authorized organization's site. In theexisting research study, the author worked on an old KDD dataset. It is necessary to workwith the latest dataset to identify the current state of DDoS attacks. This paper, used amachinelearningapproachforDDoSattacktypesclassificationandprediction.Forthis purpose,usedRandomForestandXGBoostclassificationalgorithms.Toaccesstheresearch proposed a complete framework for DDoS attacks prediction. For the proposedwork,theUNWS-np-15 dataset was extracted from the GitHub repository and Python was used as a simulator. After applying the machine learning models, we generated a confusion matrix for identification of the model performance. In the first classification,the results showed that both Precision (PR) and Recall (RE) are _89% for the RandomForest algorithm. The average Accuracy (AC) of our proposed model is _89% which issuperbandenoughgood.Inthesecondclassification,theresultsshowedthatbothPrecision (PR) and Recall (RE) are approximately 90% for the XGBoost algorithm. Theaverage Accuracy (AC) of our suggested model is 90%. By comparing our work to theexistingresearchworks,theaccuracyofthedefectdeterminationwassignificantlyimprovedwhichis approximately85%and79%,respectively.

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