Abstract

Intrusion detection (ID) is the task of analysis the event occurring on a network system in order to detect abnormal activity. Intrusion Detection System has increased due to its more constructive working than traditional security mechanisms. As the network data is dynamic in nature, it leads to the problem of incremental learning of dynamic data. Now, combining classifiers is a new method for the improving classifiers robustness and accuracy. Most of ensemble methods operates in batch mode. For this purpose, proposed system incremental combining classifiers that combines three classifiers that operates incrementally on dynamic data, Naïve Bayes, K-star, Non Nested Generalised Exemplars classifiers based on voting approach. In incremental learning process, numbers of hypotheses are generated during
classification; an ensemble decision method is required to aggregate all the votes from multiple hypotheses for the final decision process which produces better accuracy in most of the cases in experiments.

References

- Ade, Roshani, and P. R. Deshmukh. “An incremental ensemble of classifiers as a technique for prediction of student's career choice", ICNSC.
- NSL-KDD dataset for network-based intrusion detection systems available on
Intrusion Detection based on Incremental Combining Classifiers

http://iscx.info/NSL-KDD/

Computer Science

Index Terms

Security

Keywords

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