**Comparative analysis between different Ensemble Voting Classifiers on IDS datasets**

**Abstract**

IDS or Intrusion Detection Systems, play a vital role towards ensuring the safety of computer networks from malicious activities. To improve upon the accuracy of such systems Ensemble Voting Classifiers have emerged as an effective tool. These classifiers work on the principle of Ensemble Learning where different base models are used to collectively predict the output of a given data.

However, it is worth noting that there is a big research gap in the context of IDS data sets and Ensemble Voting Classifiers.

As a result, the main objective here is to evaluate the performance of these classifiers over IDS datasets in terms of various performance metrics. This will help determine the strengths and weaknesses of each classifier while also presenting ideas on which one works best and why so.

Furthermore, it will offer us more insights on the impact of different base classifiers on the overall performance of ensemble methods. The findings from this analysis will lead to a broader understanding on the potential application of ensemble voting classifiers in IDS scenarios, aiding in the selection of a suitable algorithm for specific security requirements.

*Keywords*: IDS, Intrusion Detection Systems, Voting Classifiers, Ensemble Learning, Performance metrics.

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