

ABSTRACT

Fraud Detection represent one of problems which important in data mining, modeling the very little apparition phenomenon in a very big data, need differ treatment from other modeling method. This phenomenon commonly interpreted as trouble or noise, but in this fraud detection this phenomenon represent an important matter. One of the technique which commonly use in detection of fraud is classification, but this commonly classification technique cannot predict fraud well because of the existence of characteristic from fraud where fraud class which wish be predicted usually have tendency fewer compared to normal data which commonly called to detect the rare event. One of algorithm in detecting rare event is PNRule.

In this final project will be done performance analysis of PNRule result, analyse the influence of the rule form to performance result, analyse the comparison of PNRule performance compared to other classification method and analyse the strength and weakness of PNRule algorithm in detecting case fraud .

The result show conclusion that PNRule assumed to succeed in predicting fraud, with good performance. PNRule parameter very influencing the rule form yielded, which in the end will influence the performance result. PNRule algorithm yield the performance value that is far better compared to other classification algorithm that is OneR and ConjunctiveR. The strength from this PNRule algorithm is the performance result in fraud detection system very good. Weakness from PNRule algorithm is, to get the best result as according to requirement, process must be done repeatedly to measure values of input parameter till get the parameter values which can give the best result as according to requirement.

Keyword : : *Fraud Detection , Rare Event, Klasifikasi, PNRule*