

## ***Abstract***

*Outlier detection is a technic to search Objects which have different carateristic from other object. Some methods that can use to detect outlier are Clustering-based, Distance-based, Association Rule-base and Density-based. In this Final Task will use Local Correlation Integral method which is part of the Density-based method. The advantages of this method are it can give an automatic data-dictated cut-off, and this LOCI method also have a linear approximate method aLOCI (approximate LOCI) that can detect outlier more faster without ignore the accuracy.*

*To test the performance of this method the testing is using accuracy parameter and detection time parameter. For accuracy, it will use Recall and Precision and to combine it will use f-measure function.*

*From the result that the system gave, the conclusion are that in accuracy LOCI method is more accurate than aLOCI, but in detection time, aLOCI method is more faster than LOCI. And also in LOCI the detection time is more affected by the grow of Instances and in aLOCI the detection time is more affected by the grow of Attributes.*

***Key Words : Data Mining, Outlier, Correlation Integral, Box Counting.***