

## **Abstract**

Classification is one of functionality in data mining that often used to find a set of rules that describe or distinguish data classes. One of the algorithm that are often used for the classification process is the algorithm of K Nearest Neighbors (kNN). However, due to lack kNN in processing large datasets, then we proposed an algorithm that called LAESA where improvements can speed up the time and is expected not to change the accuracy of kNN.

**Keywords:** Classification, *LAESA*, *k-NN*, *Text mining*