ABSTRACT

Stroke is a functional brain disease which in medical terms is commonly called Transient Ischemic Attack, is a neurological disease that occurs due to disruption of blood supply to parts of the brain that occurs forcibly. Stroke management must be carried out quickly and appropriately to avoid or further complications.

In this era of highly developed technology, the author makes a machine learning program to identify someone to have a stroke, so that people are more aware of the dangers of the disease. The method used by the author is the Support Vector Machine (SVM) to classify someone affected by stroke, this SVM method is very suitable for use because SVM has a pretty good accuracy for a classification. With this program, a person will know what percentage of the chance that someone will have a stroke and not have a stroke, which will be known through the percentage that will come out after the program is run.

The purpose of the author of making this program is to test the SVM algorithm in the classification of stroke data, this program uses the SVM classification which gets the highest accuracy results from unbalance data in the linear kernel, which is 76% and polynomial by 80%. For balanced data, the authors get accuracy results in the linear kernel 77%, and in the polynomial 76%.

Keywords: *Stroke, Machine Learning, Support Vector Machine*