

ABSTRACT

To be a student at University there needs to be several tests to get into this university, one of those methods is the non-writing selection line. This method uses high school grades for non-writing channels, which have different ratings compared to prospective students enrolling and taking written tests. For this case, the classification process is used to predict a class or classes by looking for data that are classified as prospective students who graduated or not at the stage of new student slots non-write / use report cards.

Adaptive Neuro Fuzzy Inference (ANFIS) algorithm is a combination of Artificial Neural Network (ANN) and Fuzzy Inference System (FIS). Where Artificial Neural Networks can be used to program such as how humans work, for the FIS part is a reasoning system like a human being. This final project aims to produce predictive and analysis results from the use of ANFIS algorithm towards new student selection data of non-writing selection.

After a study of scenario with the use of original data and balancing data performance obtained indicates that ANFIS algorithm produces accurate training 78% and testing 73% is good enough and generates a fairly small number of errors MSE 0,1555 and MAD 0,315697 so it can be used to evaluate the acceptance of new students non-written selection.

Keywords : *Adaptive Neuro Fuzzy Inference (ANFIS), data balancing, Classification, Selection of non-written line students.*