ABSTRACT

To be a students at University there needs to be several test to get into this university , one of that method is the non-writing selection line. this method used high school grades for non-writing channels has different ratings compared to prospective students enrolling and taking written test. For this case used the classification process to predict a class or class 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 peformance obtained indicate that ANFIS algorithm produces accurate training 78% and testing 73% is good enough and generate 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.*