

ABSTRACT

Teacher have an important role in Indonesia's education as professional educator in all grade of education in Indonesia. Teacher certification held to select teacher who fullfil basic competence as educator. It's not easy to make the decision for graduation of participant from that certification, it must has specific method. The problem from this method was some of the result is not fair. Fuzzy can be alternative to that method's problem.

Fuzzy method was good for partial problem, but it still has weakness because information from the expert was needed to solve the case. Evolutionary Algorithm's (EAs) was used to optimize fuzzy in case of certification and one of EAs is Evolutionary Programming Algorithm (EP). In this final project, evolutionary algorithm will be used to find the parameter of fuzzy system. 1500 dummy data will used as main data that made by scoring method from teacher certification. The result from hybrid fuzzy will compare with result from scoring method using confusion matrix.

Based on scoring method that not graduating participants because had one bad point, fuzzy will graduating after evaluate other point. Accuracy of learning hybrid fuzzy is 78.8% with accuracy of testing 85.6% shown hybrid fuzzy graduating 72 participants or at least 28.9% from all of participant that not graduate from scoring method.

Keyword : Teacher certification, hybrid fuzzy, Evolutionary Algorithm's, Evolutionary Programming, Confusion Matrix.