Abstract

Natural Language Processing (NLP) is a field of Computer Science and Artificial Intelligence about human language processing. One of the applications of NLP is an Automated Essay Scoring (AES), which is an auto-scoring essay evaluation system. Naïve Bayes can be improved with Neuro Fuzzy Classification (Nefclass) because Naïve Bayes has the same data representation (the probability terms) as Nefclass system input (nodes in the input layer) so that the Naïve Bayes method makes it possible to be able to be mapped. The result of this final project is Naïve Bayes is not appropriate to improve it using Neuro Fuzzy if the study case is AES because there would be the degression of accuracy and missing antecedents in the rule that created in learning phase of Nefclass. Missing antecedents will affect to the consequent. But if the Automated Essay Scoring is developed using only Naïve Bayes could reach accuracy until 75%.

Keywords : Natural Language Processing, Automated Essay Scoring, Naïve Bayes, Neuro Fuzzy, Nefclass, antecedent, consequent