Abstract

In lingustic, semantic argument is an expression used to help understanding the meaning of a certain predicate in a sentence. The use of a precise and accurate technique to anotate a text that have semantic argument structure can facilitate the detection of information pattern inside large text dan it can also give the Who, What, Whom, When, Where, Why and How annotation of a sentence in the text.

A study about semantic argument classification implement the use of Support Vector Machine (SVM) method for Propbank database, replacing the statistical classification algorithm that is used in the previous studies, and evaluate the obvious changes for increasing the performance result. Beside that, the study using SVM method is also giving a few new features in hope that it will give an increase to the performance score that wasn't very good before.

This final project implements two new features that are going to be used together with the main feature baseline, Head Word of Prepositional Phrase along with First and Last Word/POS in Constituent and then classify it with the help of SVM Sequential Minimal Optimization (SMO) method. The result of the implementation of these two features together along with the baseline feature produce the average accuracy score of 67,99%.

Keywords : *semantic argument classification, features, Support Vector Machines.*