

ABSTRACT

Getting argument semantic representation of a sentence is important in text mining, such as information extraction and question answering. In the semantic role labeling, selection of features become influential on its performance. The problem now is how to combine the features and combinations such as what is used in order to get the expected performance for semantic role labeling. This research try to analyze and combine some of the features that already exist and have shown optimal result performance in previous studies. Features used in this research are BaselineFeature plus Noun Head of PP, First Word in Constituent, Syntactic Frame, Argument Order and Constituent Order, that will be used in the classification of a semantic argument. Results from this study indicate that not all random combinations of features can improve performance classification of semantic argument, there are some features that would degrade the performance classification if it is not combined with the right features. Based on the average of all scenarios, the best combination is the use of five additional features used in this study with an accuracy of 75.34% and f-score of 74.6%. The addition of training data can also improve the performance of the classification.

Keywords : *Feature Combination, Semantic role labelling, Classification*

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