

## ***Abstract***

*Semantic argument is one of the linguistic scope in the study of meaning in a sentences. Semantic argument is part of a technique to develop text mining solutions. By performing semantic argument classification, will identify semantic argument into more specific role label, so it can assist extract information on the text, like can answer question such as Who, Whom, When, Where, Why, and How.*

*This research proposed to classify the semantic argument the baseline feature and semantic argument neighbor feature using PropBank database. Semantic argument neighbor feature can be used as additional argument to help semantic argument classification, because there is interdependence between all the neighboring argument of the predicate. Semantic argument classification will be use classifier Support Vector Machine (SVM). From the testing scenario, the average accuracy of semantic argument classification using baseline feature is 63.91%, while the average accuracy based on baseline feature and dependence neighboring argument feature of the predicate in a sentence amounting to 71.21%.*

**Keyword :** *semantic argument classification, baseline feature, semantic argument neighbor feature*