

## ABSTRACT

Text Summarization is a process to generate a summary from articles but it has accurate main points from the content of the articles. Text Summarization often produce summary with a redundant sentence because of the ambiguous words (ambiguity). Word Sense disambiguation is a process to identifying the meaning of words used in a particular sentence, when the word has several different meanings.

This system implements lexical chain with word sense disambiguation method, is an development from lexical chain method. Lexical chain is one kind of text summarization method, this method make form of lexical chains based on semantic relationships between words in the text. Lexical chain method still has a trouble, that is form of lexical chain can be inaccurate if there ambiguity word or words that have double meanings. Therefore, the lexical chain method combined with word sense disambiguation method using lesk algorithm with knowledge source that is WordNet 3.0 can helping to eliminate the ambiguity of words in lexical chain form.

The test results that has been done in this thesis shows that by applying the word sense disambiguation in lexical chain method can increased performance summary results if compared with the original lexical chain method. Use of the word sense disambiguation method using the lesk algorithm can help lexical chain method create lexical chains by removing the ambiguity of each candidate term. So can minimize the level of redundancy in the selection of a sentence that would be the result of summary.

**Keyword:** Text Summarization, Lexical Chain, Word Sense Disambiguation, Lesk Algorithm, Wordnet.