ABSTRACT

Currently the largest amount of textual information in a repository such as WEB. To process such large amounts of information text Summarization automatic (automatic text summarization) becomes so important. Automatic Text Summarization (automatic text summarization) is the most important filter information from a source or multiple sources to create a compact version of the text by using applications that run on the computer.

This final project uses a method to create three-factor extraction based on readability, cohesion, and topic relations by using harmony search based on the selection of the sentence to make a summary. Once created summary, evaluated by a fitness function based on three factors. Also look for the harmony search parameters that can generate an optimal summary. Testing is also done using the Rouge evaluation toolkit to see the results of recall, precision and f-measure by comparing the results of human summary or summary reference. Harmony search parameters that can find a summary of the global optimum has a value of 0.9 HMCR. Paraemter HMCR above 0.9 is close to 1 is not better because the process of diversification is reduced. Results from tests using Rouge-2 proves that the average summary results using harmony search algorithm, 50% close to the reference summary.

Keywords *: automatic text summarization, readability , cohesion, and topic relation., harmony search*