AN AUTOMATIC THAI TEXT SUMMARIZATION USING TOPIC SENSITIVE PAGERANK

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ABSTRACT

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With the exponentially growing of information on the Internet and WWW, a large amount of the text collection expands. Automatic text summarization has become increasingly important to provide summary to help users retrieve the intended content rapidly. There are many applications of text summarization which include information extraction, knowledge acquisition, finding answers from specific questions, etc. The principle of automatic text summarization is that relevant information available in a document is abstracted into a shorter text by using a proper methodology.

This research proposes a technique for automatic Thai text summarization by using content-based and graph-based characteristics. It presents a logical view of texts by creating a relative document graph relying on content-based features. Topic Sensitive PageRank algorithm then assigns a score to each segment. A set of segments with high scores are extracted as a summary.

Experiments were conducted with Thai document data set and the DUC 2002 data set for English. There are two evaluation approaches to evaluate the proposed technique which is recall, precision and F1; and ROUGE measurement. The experimental results of the proposed technique show satisfactory results in the Thai and English documents summarization task.

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