

Abstract

Automatic text summarization is distilling the most important information of a source (or sources) for making a brief version of text(s). The purpose of automatic text summarization is user can understand the text(s) without reading all whole text(s).

This final assignment implements *Hyperlinked Induced Topic Search* (HITS) algorithm that is belonging to graph-based. HITS ranks all sentences by counting the relation between the sentences. The ranking process is done by giving a score of every sentences based on their importance. High sentences' score will be extracted to be a summary. HITS algorithm is represented by undirected graph, direct forward graph, and direct backward graph. Also running the algorithm until convergent and just one iteration.

Evaluation of summaries uses ROUGE evaluation toolkit for Indonesian texts and counting the recall and precision scores for English texts. The result of experiment shows accuracy of one iteration running algorithm is better than *the* convergent one, if the extraction is short. Representation with undirected graph's accuracy is better than the convergent one. Besides that, direct forward and backward representation show that has the same score.

Keywords: automatic text summarization, HITS algorithm, direct forward, direct backward, undirected, convergent iteration