

## Abstract

Automatic text summarization is a computerized process of distilling the most important information of a source (or sources) for making a brief version of text(s).

This final assignment implements graph-based summarization algorithm and similarity applying graph-based ranking concept for sentences ranking. The process produces the output in the form of extractive summary that consists of high ranked sentences. Graph-based method applied is *TextRank*, and two other methods which combine the *TextRank* concept and similarity with title concept, *modified TextRank* and linear combination of *TextRank* and *similarity with title*.

Evaluation of summaries uses ROUGE evaluation toolkit. The result of experiment shows accuracy of *modified TextRank* and linear combination of *TextRank* and *similarity with title* is better than *TextRank*. Linear combination of *TextRank* and *similarity with title* shows the best accuracy. Besides that, stopwords elimination as a language knowledge to the method does not always improve accuracy of summaries.

**Keywords:** automatic text summarization, *TextRank*, *modified TextRank*, *similarity with title*, *stopwords*