

## PREFACE

A useful method of natural language processing called text summarization, often referred to as text abstraction, tries to compress and extract the majority of important details from a given text. It makes it possible to create succinct summaries that highlight the most important concepts and themes, which makes it simpler for readers to understand and properly process lengthy texts.

The TextRank algorithm, that is based on the PageRank system used by search engines to rank web pages, is one well-liked method of text summarization. By using graph-based ranking, TextRank can determine the most significant sentences or phrases inside a text and use those to build a summary.

We explore the idea of summarization of text and the application of the TextRank algorithm in this text. We investigate how the algorithm assigns relevance ratings, examines the relationships between sentences and words, and creates a condensed version of the original text. Additionally, we go into TextRank's uses in numerous fields, including news stories, academic papers, and social media, as well as its advantages and disadvantages.

The TextRank algorithm's capacity to automate the process of compressing large texts may be appreciated by knowing the principles underlying text summarization. This makes TextRank an important tool for information the extraction process, document organisation, and improving reading efficiency.