TITLE OF PROJECT

# TEXT SUMMARIZATION

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**INTRODUCTION**

Text summarization refers to the technique of shortening long pieces of text. The intention is to create a coherent and fluent summary having only the main points outlined in the document.

Automatic text summarization is a common problem in machine learning and natural language processing (NLP).

# OBJECTIVES OF RESEARCH

Today, our world is parachuted by the gathering and dissemination of huge amounts of data. With such a big amount of data circulating in the digital space, there is need to develop machine learning algorithms that can automatically shorten longer texts and deliver accurate summaries that can fluently pass the intended messages.

**Main approaches to summarization**

There are mainly two types of summarization techniques in NLP:

* Extraction-based summarization
* Abstraction-based summarization

**Main steps for text summarization**

There are three main steps for summarizing documents.These are topic identification, interpretation

and summary generation.

There are mainly three steps for doing text summarization. They are topic identification, Interpretation and Summary generation.

* **Topic Identification:** The most prominent information in the text is identified. There are different techniques for topic identification including position, Cue Phrases, word frequency methods which are based on the position of phrases . These are the most useful methods for topic identification.
* **Interpretation:** Abstract summaries need to go through interpretation step. In this step, different subjects are fused in order to form a general content.
* **Summary Generation:** In this step, the system uses text generation method.

**PROBLEM STATEMENT**

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and summary generation.

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techniques for topic identification are used which are Position, Cue Phrases, word

frequency.Methods which are based on the position of phrases are the most useful methods for

topic identification.

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3.3. Summary Generation :In this step, the system uses text generation metho

The Problem Statement deals with to summarize the given paragraph into a single sentence by using text summarization techniques.

This analysis helps us to summarize the given paragraph into sentence form.

**TEXT SUMMARIZATION WITH PYTHON**

Text summarization with python involves to do text summarization by using python. Here, we import the libraries for our necessity. By using Python, we can easily summarize the given paragraph.

**PACKAGES INSTALLATION**

* First we need to import the library files such as tokenize, corpus and stopwords from nltk

**from nltk.tokenize import sent\_tokenize,word\_tokenize**

**from nltk.corpus import stopwords**

**from collections import defaultdict**

**from string import punctuation**

**from heapq import nlargest**

* Then, By defining functions we tokenize the sentences and then remove the stopwords then summarize the input text or paragraph by console has been summarized by using the frequency summarizer.

**fs = FrequencySummarizer();**

**for s in fs.summarize(text,1):**

**print("\*",s)**

* In this way , we can summarize the given paragraph into sentence.

CONCLUSION

From the above results we can conclude that we can summarize

the given paragraph into a single sentence by using different

machine learning techniques. In this busy life and full of work

we can use these summarization techniques to save our time.

**REFERENCES**

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***THANKING YOU***