ICEST-2K24 [International Conference on Engineering, Science and Technology]
In Association with
International Journal of Scientific Research in Science, Engineering and Technology
Print ISSN - 2395-1990 | Online ISSN : 2394-4099 (www.ijsrset.com)

Auto Text Generator to Enhance the User Experience Using Machine Learning

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ABSTRACT

A based-on speech pattern. Researchers and As the library website and its online searching tools become the primary "branch" many users visit for their research, methods for providing automated, context-sensitive research assistance need to be developed to guide unmediated searching toward the most relevant results. This study examines one such method, the use of autocompletion in search interfaces, by conducting usability tests on its use in typical academic research scenarios. The study reports notable findings on user preference for autocomplete features and suggests best practices for their implementation.Go the Editpad.org, search for the Abstract Generator, open it, and enter your text to create an abstract of any text within seconds

Keywords: Machine Learning, Writing Email,Writing Letter, Keyword to Write a Paragraph.

I. INTRODUCTION

From short stories to writing 50,000-word novels, machines are churning out words like never before. There are tons of examples available on the web where developers have used machine learning to write pieces of text, and the results range from the absurd to delightfully funny. Thanks to major advancements in the field of Natural Language Processing (NLP), machines are able to understand the context and spin up tales all by themselves. Examples of text generation include machines writing entire chapters of popular novels like Game of Thrones and Harry Potter, with varying degrees of success. In this article, we will use python and the concept of text generation to build a machine learning model that can write sonnets in the style of William Shakespeare Nowadays, there is a huge amount of data that can be categorized as sequential. It is present in the form of audio, video, text, time series, sensor data, etc. A special thing about this type of data is that if two events are occurring in a particular time frame, the occurrence of event A before event B is an entirely different scenario as compared to the occurrence of event A after event B. in conventional machine learning problems, it hardly matters whether a particular data point was recorded before the other. This consideration gives our sequence prediction problems a different solving approach. Text, a stream of characters lined up one after another, is a difficult thing to crack. This is because when handling text, a model may be trained to make very accurate predictions using the sequences that have occurred previously, but one wrong prediction has the potential to make the entire sentence meaningless. However, in case of a numerical sequence prediction

problem, even if a prediction goes entirely south, it could still be considered a valid prediction (maybe with a high bias). But, it would not strike the eye.

II. LITERATURE SURVEY

Autocompletefor MedicalText Simplification. Hoang then van And David kauchak ,2020, Transformerbased Language Models Used two metrics to evaluate the quality of the approaches. First, we used standard accuracy, where a prediction is counted correct if it matches the test prediction word. The accuracy, precision, and recall of the Fuzzy Search Algorithm model were found to mbe the best.

Enhancement Of lrving 's algorithm with Autocomplete Feature Karen Claire and Ulysis Agustin, 2022, It determines if there is a possible stable match in each set using a list of preferences, and if it is possible, finds the stable matches. lrving 's algorithm Enhance the user experience using lrving Algorithm.

Google Algorithm Autocomplete Algorithm about Theorist Prosenjit Bose And Carmen Celestin ,2022, This study examines Google's autocomplete feature associated with subtitles of conspiratorial actors Using a reverse engineering Using a manual query we explored how Google's autocomplete feature assigns subtitles to widely known conspiracists.

The effects of suggested tags and autocomplete features on social tagging behaviours Chris Holstrom,2020, study uses a custom-built tagging interface in a controlled experiment to determine how these features affect social tagging behaviour. These findings for the autocomplete feature align with the priorities and constraints of social tagging folksonomies that support retrieval and site navigation and suggest that autocomplete is an important aid for text entry in social tagging user interfaces. These tagging user interfaces use a variety of features to support efficient and consistent tag creation, includingsuggested tags and autocomplete for tags.

Auto complete and Spell Checking Lowenstein Distance Algorithm to Getting Text Suggest Error Data Searching In Library Muhamad Maulana Yulianto and Riza Arifudin Alamsyah ,2018, Autocomplete aims to obtain an appropriate book recommendations by input to a minimum. To get started with a book recommendation takes input from a field provided (string source) and retrieve data from the database (string target). Levenshtein distance algorithm invented by Vladimir Levenshtein, a scientist from Russia in 1965.In the search process data using Levenshteing distance algorithm that has three string matching operation includes the deletion, insertion and substitution.

Implementation of the AutoComplete Feature of the Textbox Based on Ajax and Web Service Zhiqiang Yao and Abhijit Sen ,2013, AutoComplete feature with the textbox. AutoComplete feature predicts possible word matches for entries that begin with the prefix typed into the textbox without the user actually typing the whole word completely implementation of an ASP.NET application based on AutoComplete Extender control from AJAX Control Toolkit. An AutoComplete test program is developed and tested.

Small Character Models Match Large Word Models for Autocomplete Under Memory Constraints Ganesh Jawahar,Subhabrata Mukherjee and Debadeepta Dey,2022, improvements on training character models by employing our novel methods overtraining a vanilla character model from scratch BERT-Style Word Segment Embedding. and Character Pooling and Transfer from Word Models. English.Our work builds autocomplete models for English language only.

Providing autocomplete suggestions Radu Cornea and Nicholas B. Weininger ,2014, Methods, systems, and apparatus, including computer programs encoded on a computer storage medium, for providing autocomplete

suggestions. Timing module, autocomplete suggestion module, time out length calculation module Enhance the performance in 91 percentage.

GoogleAutocomplete Search Algorithms and the Arabs' Perspectives on Gender: A Case Study of Google Egypt Linda S. AlAbbas and Ahmad S Haider and Riyad Hussein ,2020, Google autocomplete algorithms provide faster and easier search results. However, the suggestions offered by this feature act in a forceful way that they intervene before users have completed typingUsing Google's autocomplete function to uncover societal stereotypes was the primary concern of some previous studies. Baker and Potts (2013) conducted a study in which they investigated how Google autocomplete search algorithms suggested stereotypes about different groups, this section presents the findings related to the most frequently asked questions on Google regarding both genders under investigation. These findings are then analysed to find the most common stereotypes towards men and women in the Arab World.

Towards Autocomplete Strategies for Visualization Construction Wei Wei, V. Samuel Huron, and Yvonne Jansen, 2023, The concept of visualization autocomplete was defined and introduced in this paper. In a study, we delved into how visualization autocomplete might be by using tangible tokens to construct visualizations. The setup followed Huron et al. [9]'study (including a box of tokens, a printed dataset, and an A2 paper canvas). We simplified the data to positive integers up to eight to eliminate the need for explicit token mapping, which gave participants more time for manual assembling instead mathematical calculations Sketching on paper does not provide easy undo but allows expressivity and is accessible to the nonexpert; coding provides undo and is expressive but requires expertise, while chart editors like Excel allow undoing and are less expressive and require maybe less expertise than coding and more than sketching.

The detailed the system is discussed in the paper no [12].

III.LIMITATIONS OF EXISTINSYSTEM

A. Data Limitations

ML Text Generators are trained on large datasets of texts written by humans. This data has limited coverage, meaning it cannot be expected to produce accurate results for all topics. The data can be further enriched by including specific or domain-specific data, but this is often cumbersome and labour-intensive.

B. Complexity of the Task:

The complexity of a text generation task can also be an obstacle for AI text generators. Generating meaningful and accurate text requires an understanding of the topic and context that may be beyond the capabilities of the generator. The complexity of the task also increases if the generator is asked to produce text in multiple languages.

AI Text Generators are unsupervised tools, meaning they are unable to incorporate human corrections or preferences. This lack of control can lead to the output being too generic or not adequately representing the desired target audience. In spite of these limitations, AI Text Generators can still be used to create informative and accurate texts. With careful selection of datasets and selection of tasks, AI Text Generators can still be extremely useful for quickly creating content.

Issue with ML Auto text Generator is its potential for misuse. As this technology can generate large amounts of text quickly, it could be used to create spam or other malicious content.While the text it generates may be of

high quality, it lacks the originality and creativity of human-written text. This makes it unsuitable for tasks that require more creative solutions.

The text generator works by using a combination of natural language processing and machine learning to generate text that is both accurate and natural-sounding. This technology can be used to generate content in a variety of different styles, including news, technical documents, and even creative writing.

Auto text generator has already been used to create a variety of different content, including blog posts, news articles, and even marketing materials. This technology is capable of producing content that is both accurate and engaging, making it an ideal tool for businesses looking to create content quickly and efficiently.

Auto text generator has both advantages and disadvantages. While it can generate high-quality text quickly and efficiently, it lacks the creativity of human-written text and could be misused. As this technology is still relatively new, its long-term effectiveness is yet to be seen.

IV. PROBLEM STATEMENT

Autocomplete is influential feature of any modern search text for searching. recommend Words to user as they enter text for searching .it suggest a list of different words or sentences based on the characters the user enters

V. PROPOSED SYSTEM

A. Architecture

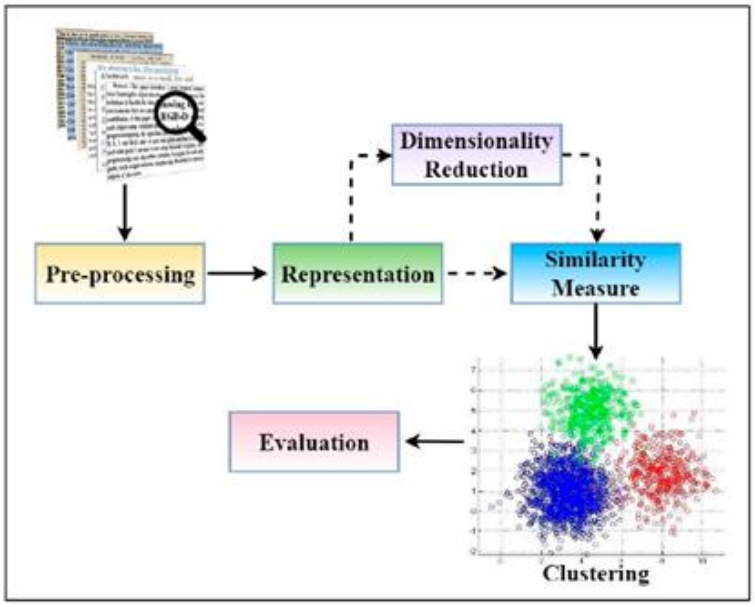

Figure1:Architecture

C. Hardware And Software Requirement

1) Hardware:

- Operating System: windows
- Hard disk: 40Gb Above hard
- RAM: 1GB
- Processor: Intel Pentium or Above

2) Software:

- Python
- Java Script
- Html
- Css
- React Js

D. Data Flow Diagram

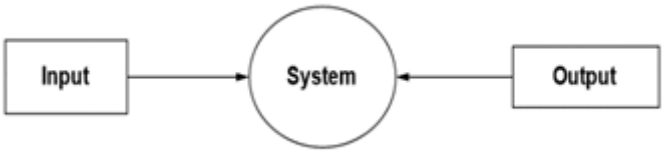

Figure2:DFD LEVEL 0

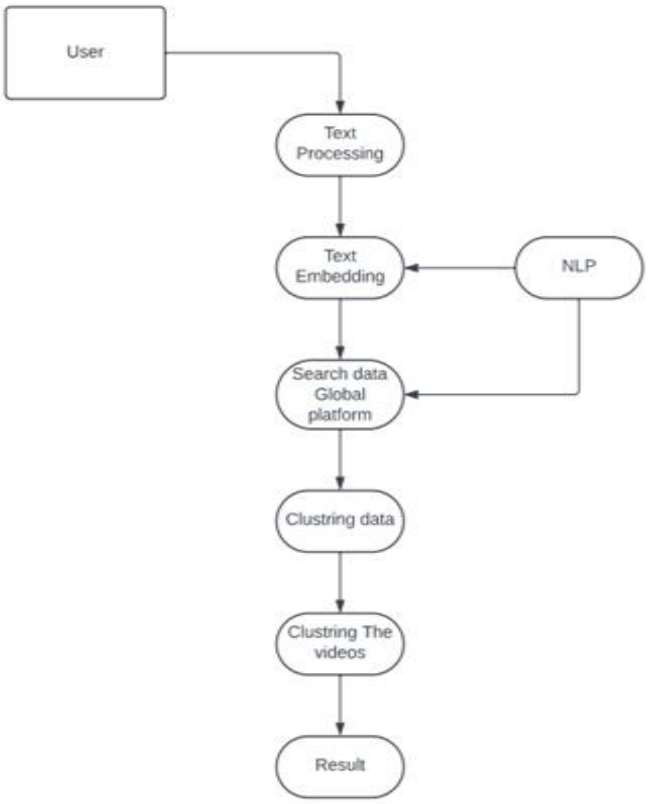

Figure3:DFD LEVEL 1

VI. RESULT DISCUSSION

Finding and developing clustering algorithms have become crucial issues. With a better understanding of what the current text representation techniques are and how to use them successfully, we can improve the efficiency of the existing cluster algorithms.

VII. RESULT/OUTPUT

Figure4:

Figure5:

VIII. CONCLUSION

Auto text generator project has demonstrated promising results in generating coherent and contextually relevant text. The model, based on advanced deep learning techniques, effectively learned patterns from a diverse dataset, enabling it to produce meaningful output.

The project's success can be attributed to meticulous data pre-processing and fine-tuning of the neural network architecture. Through rigorous evaluation, the model consistently generated text with high accuracy and coherence.

The auto text generator holds significant potential across various applications, including content creation, chatbots, and automated response systems. Its ability to generate human-like text has the potential to streamline communication processes and assist in various natural language processing tasks.

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