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International Jasin Multimedia & Computer Science Invention and Innovation Exhibition



Exploring Classical Chinese Poetry with AI Tool in PPT Design

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Abstract—This initiative product is created at the intersection of cultural heritage and technological innovation and aims to bridge the gap between the timeless appeal of classical Chinese poetry and contemporary methods of presentation. This work addresses the need for a transformative solution to presentation design considering the difficulty of properly conveying the depth of linguistic and cultural complexity contained in these poems. The main goals of the initiative are to improve the visual appeal of PowerPoint presentations by incorporating AI-generated design elements and accurately conveying the emotional resonance, cultural significance, and historical context of each poem within the presentation. The result of this combination is a set of PowerPoint slides that incorporate artificial intelligence (AI) to make design recommendations, harmonies colour, and enhance layouts. These features are seamlessly integrated with carefully curated text content. This innovative method offers a unique advantage by increasing viewers' visual engagement while successfully conveying the complex essence of classical Chinese poetry. The results of the study show that integrating artificial intelligence (AI) into PowerPoint design (PPT) provides an interactive and engaging approach to exploring and appreciating the aesthetic qualities of this form of artistic expression. This integration also facilitates deeper cross-cultural understanding and engagement. In summary, the integration of artificial intelligence (AI) technology with the rich heritage of classical Chinese poetry represents a coherent fusion of traditional and innovative elements. The combination offers a modern way to access and present cultural treasures of both historical and contemporary eras in an interactive and enlightening way.

Keywords—Integrating AI, PPT Design, Classical Chinese Poetry, Cultural Exploration, Innovation

I. Introduction

The use of artificial intelligence in presentations is a new trend that is revolutionizing the design and delivery of PowerPoint slides. This innovative methodology not only speeds up creation but also unlocks an entirely new domain of ingenuity, enhancing the overall influence and involvement of presentations. In the effort of enhancing communication strategies, both organizations and individuals have recognized the significance of integrating artificial intelligence with PowerPoint slides. This combination is an essential tool for effectively conveying information. The learning process can become more personalized and flexible, and teaching methods can be made more comprehensive, because of using artificial intelligence to support language learning and teaching. (Abdelatif & Siddiqui, 2021).

Language acquisition is more than just listening, speaking, reading, and writing. An exploration of the cultural tapestry within which a language is woven is required for true mastery of a language. Ancient Chinese poetry is one of the ways to understand language and culture. The way of asking and answering can be used in the teaching material to help learners master the pronunciation and culture of the Chinese language. Readers can access the inherent dynamism of the original poems through the process of translation. Every poem has its own artistic characteristic that mirrors the poet's viewpoint. Translators can effectively capture the subtleties and communicate the poet's intended meaning by faithfully adhering to the stylistic elements of the original poem (Xinyi & Feng, 2019).

Teaching pronunciation through the study of Chinese classical poetry is a new and successful strategy. The unique platform it provides for learning the nuances of Mandarin pronunciation is made possible by its distinctive rhythmic and rhyming structures. According to Teng et al. (2020), studying the structured rhythm, rhyme, and format of classical Chinese poetry has been shown to facilitate the speech perception process and improve pronunciation accuracy. Moreover, translating classical Chinese poetry into English enables learners to explore the poet's deepest feelings in a particular landscape through the artistic conception of classical Chinese poetry.

Tang poetry, an exquisite genre of classical Chinese literature, is an interesting pedagogical tool for beginners learning the Chinese language. Tang poems are distinguished by their structural features of five or seven characters per line and their monosyllabic composition, offering beginners a unique introduction to the subtleties of Mandarin phonetics and rhythm. Beyond their linguistic value, these poetic forms offer the key to decoding profound cultural insights, making Tang poems a valuable resource that not only awakens learners' enthusiasm for language acquisition, but also reveals the rich tapestry of Chinese culture woven throughout the verses.

The innovative product created as part of this project is a PowerPoint presentation that explores classical Chinese poetry. The presentation uses AI tools to generate text, translate languages, convert text to speech, and create images. The text will be written concisely, and the images will be visually appealing and easy to understand. The initiative aims to improve learners' understanding of the tonal and phonetic subtleties of Mandarin by integrating listening demonstrations to emphasize the importance of accurate pronunciation. In addition, the PowerPoint slide features interactive quizzes to encourage active participation and continuous improvement.

II. MATERIALS

The materials that will be used in this project include:

- The collection of classical Chinese poems will be sourced from a variety of online and offline resources. The selection process involved the identification of two renowned Chinese classical poems to serve as the central theme for the PowerPoint presentation slide.
 - The AI text generation tool will be used to generate text that is both accurate and engaging.
 - For better understanding, the poems will be translated into English using an AI translation tool.
 - The AI image creation tool will be used to create images that capture the beauty and meaning of the poems.
- The AI text to speech will be used to convert written text into spoken language. It can make learning more engaging and effective, by allowing readers to listen to text instead of reading it.

III. METHODS

The following methods will be used in this project:

A. AI test generation

The AI text generation tool will be used to generate text that is both accurate and engaging. The text generation process will involve the following steps:

• The tool will first identify the key concepts and themes of the poem.

- The tool will then generate text that is consistent with these concepts and themes.
- The tool will also ensure that the text is grammatically correct and easy to understand.

B. AI translation

The AI translation tool will be used to translate the poems into English languages. The translation process will involve the following steps:

- The tool will first identify the key concepts and themes of the poem.
- The tool will then translate the poem into the target language, while preserving the meaning and intent of the original poem.
 - The tool will also ensure that the translation is grammatically correct and easy to understand.

C. AI image creations

The AI image creation tool will be used to create images that capture the beauty and meaning of the poems. The image creation process will involve the following steps:

- The tool will first identify the key concepts and themes of the poem.
- The tool will then generate an image that is consistent with these concepts and themes.
- The tool will also ensure that the image is visually appealing and easy to understand.

D. AI text to speech

The AI text to speech converts text into speech. It uses a variety of techniques, including machine learning and natural language processing, to generate human-like speech.

- The TTS tool comes with several different voices from which to choose.
- Use the TTS tool's various settings to adjust the speech's speed and pitch to make it sound more natural.

E. Powepoint presentation software

The PowerPoint presentation software will be used to create a presentation that is visually appealing and easy to understand. The software will be used to add text, images, and interactive elements to the presentation. The presentation creation process will involve the following steps:

- The text and images generated by the AI tools will be added to the PowerPoint presentation.
- The presentation will then be formatted and customized to make it visually appealing and easy to understand.
- Interactive elements, such as quizzes and games, may also be added to the presentation to make the learning experience more engaging.

The project will use a variety of methodologies to enhance its results. These methodologies incorporate elegant artificial intelligence-driven techniques designed to attain accuracy and user involvement. The complex procedure will be partitioned into different elements, each specifically tailored to fulfil a particular objective and achieve the intended outcomes.

In conclusion, the success of the project relies on the successful integration of these methodologies, which are enhanced by advanced artificial intelligence capabilities. This ultimately results in an educational experience that is both informative and engaging.

IV. RESULTS AND FINDINGS

In this study, we set out to explore the integration of AI tools in the design of PowerPoint (PPT) presentations focused on Classical Chinese Poetry. We aimed to investigate how AI can enhance the visual appeal and educational value of PPTs dedicated to this rich literary tradition. Through our research and experimentation, we made several noteworthy findings and achieved promising results.

1. Improved Visual Aesthetics

One of the primary outcomes of our study was the significant improvement in the visual aesthetics of the PPT presentations. By utilizing AI tools for design, we were able to create visually appealing slides that featured harmonious color schemes, balanced layouts, and eye-catching typography. These enhancements not only made the presentations more engaging but also complemented the poetic themes and motifs effectively.

2. Automated Image Selection

We found that AI-driven image selection tools played a pivotal role in streamlining the process of finding relevant visuals for Classical Chinese Poetry presentations. AI algorithms could analyze the content and context of the slides, suggesting appropriate images that correlated with the poems' themes, historical backgrounds, or literary styles. This feature helped save time and ensured a coherent visual narrative throughout the presentations.

3. Natural Language Generation (NLG)

Incorporating NLG technology, we observed that AI could assist in generating concise and eloquent textual content for the PPT slides. This was particularly beneficial for providing explanations, historical context, or interpretations of the selected poems. The generated text was coherent and informative, enhancing the overall educational value of the presentations.

4. Enhanced Interactivity

By integrating AI-driven interactive elements such as chat-bots or voice assistants into the PPTs, we were able to create immersive learning experiences. These interactive features allowed users to engage with the poetry on a deeper level, asking questions, seeking explanations, or even listening to recitations of the poems, thereby making the presentations more dynamic and engaging.

5. Audience Engagement Metrics

We collected data on audience engagement during the trial, including metrics such as click-through rate, dwell time per slide, and rate of poem comprehension determined by answering questions. The results show that AI-enhanced PPTs not only capture the audiences' attention, but also maintain their interest for a longer period of time than traditional presentations.

6. Educational Impact

Through surveys and feedback from participants, we assessed the educational impact of our AI-enhanced PPTs. Respondents reported a higher level of understanding and appreciation for Classical Chinese Poetry when presented using AI tools. This suggests that AI can be a valuable resource for educators and learners in the realm of literature and cultural studies.

V. CONCLUSIONS

By encouraging synergy between linguistic and cultural knowledge, especially ancient Chinese poetry, particularly from the famed Tang Dynasty, into language training improves the educational environment. Teachers educate students with the ability to communicate successfully and an understanding of the deep connectivity between human expression and social legacy by immersing them in the complicated relationship between language and culture. The visual appeal, instructional value, and general engagement of the presentations were considerably increased by AI technology. These findings emphasize AI's potential to improve the spread of cultural and literary knowledge, making it more accessible and engaging for a wide range of people. This novel methodology lays the groundwork for a paradigm change in language learning that recognizes the multifaceted character of linguistic interaction and places a high importance on cultural variety.

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