

ABSTRACT FOR AI-BASED POETRY GENERATOR

The "AI-based Poetry Generator" project aims to explore the intersection of artificial intelligence and creative expression by developing a system capable of generating poetry autonomously. Leveraging advanced natural language processing (NLP) techniques and deep learning algorithms, the system learns from vast collections of poetry to understand the nuances of language, style, and sentiment. By analyzing patterns, themes, and structures in existing poems, the AI model generates original verses that capture the essence of human emotion and imagination.

The project involves several key components, including data preprocessing, model training, and evaluation. Initially, a diverse corpus of poetry spanning various styles, epochs, and cultures is curated and preprocessed to extract meaningful features and patterns. Next, a deep learning architecture, such as recurrent neural networks (RNNs) or transformer models, is trained on the processed data to learn the underlying characteristics of poetic language. The model is fine-tuned iteratively to enhance its ability to generate coherent and aesthetically pleasing verses.

Evaluation of the AI-generated poetry involves both qualitative and quantitative assessments. Human judges assess the quality, creativity, and emotional resonance of the generated poems, comparing them to human authored works. Additionally, automated metrics, such as rhyme adherence, meter consistency, and semantic coherence, provide quantitative insights into the performance of the AI model.

The AI-based Poetry Generator has the potential to revolutionize creative writing and inspire new forms of artistic expression. It can serve as a tool for poets and writers to overcome creative blocks, explore unconventional styles, and collaborate with AI as a creative partner. Furthermore, the project contributes to the broader discourse on AI creativity and raises intriguing questions about the nature of human versus machine-generated art.