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Project Title: AI-Based Video Insights Generator

Abstract

As video content continues to dominate digital platforms, there is an increasing need for innovative tools that enhance how users interact with and extract information from videos. The **AI-Based Video Insights Generator** takes video analysis a step further by incorporating not only automated video summarization, theme detection, and thumbnail generation but also advanced features like **transcript generation**, **timestamp creation**, and **voice-based multilingual summaries**.

The system uses state-of-the-art artificial intelligence and machine learning techniques to provide an all-encompassing solution for video insight generation. The **Timestamp Generation** feature accurately identifies and marks key moments or sections within the video, allowing users to quickly navigate to relevant points. **Transcript Generation** automatically converts speech from videos into text, providing a written record that can be used for reference, accessibility, or further analysis.

To cater to a global audience, the system supports **Multilingual Transcript and Voice Summary Generation**. Users can generate video summaries in both text and voice formats, available in multiple languages. This is particularly valuable for non-native speakers, making video content more accessible. Voice-based summaries are generated using natural language processing (NLP) models, ensuring that the summary captures the key points of the video in a natural and coherent manner across different languages.

Keywords: AI-Powered Video Insights, Video Summarization, Multilingual Transcript, Timestamp Generation, Voice Summary, NLP, MTCNN, Facenet, SVM, Machine Learning, Speech Processing, Content Accessibility, User Engagement.

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