

# Examining NLP Models for Efficient YouTube Transcript Synopsis: An Extensive Review

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**Abstract:** *An automatic YouTube transcript summarizer is a tool designed to help users quickly grasp the main ideas of a video without watching it in full. It does this by analyzing the video's transcript using natural language processing (NLP) and machine learning techniques. Our proposed system utilizes a deep learning model trained on a substantial dataset of YouTube transcripts, enabling it to effectively extract key points and important information. The results demonstrate that our system can generate concise and accurate summaries, making it a valuable resource for users seeking to save time while consuming video content. The YouTube Transcript Summarizer Chrome extension addresses the challenge of managing the overwhelming amount of video content on platforms like YouTube. As users face lengthy transcripts, our tool offers efficient extractive and abstractive summarization using advanced NLP models like BART and T5. This allows users to quickly grasp the main points of videos, saving time and improving comprehension. Additionally, the extension features keyword extraction with KeyBERT, further enhancing users' understanding of the content.[1].*

**Keywords:** Transcript, Youtube, Flask, Natural Language Processing (NLP), AI Model.

