

YouTube Transcript Summarizer using Natural Language Processing

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Abstract: *We spend a noticeable amount of our weekly time watching YouTube videos, be it for entertainment, education, or exploring our interests. In most cases, the overall intent is to obtain some form of information from the video. We were seeking a solution to increase the efficiency of this "information extraction" process as YouTube's speed adjustment option is the only relevant tool. The summarizer is a Chrome extension that works with YouTube to extract the key points of a video and make them accessible to the user. The summary is customizable per user's request, allowing varying extents of summarization. Key points from the summarization process, together with corresponding time-stamps, are then presented to the user through a small UI next to the video feed. This allows the user to navigate to more important sections of the video, to get to the key points more efficiently. The main idea behind it is to be able to find a short subset of the most essential information from the entire set and present it in a human-readable format. As online Textual data grows, automatic Summarization of text methods has the potential to become very helpful because more useful information can be read in a short time.*

Keywords: Natural Language Processing, Automatic text summarization, Extractive approach, Abstractive approach, Speech Summarization.

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