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Survey on Abstractive Transcript Summarization of YouTube Videos

S. Tharun¹, R. Kranthi Kumar², P. Sai Sravanth³, G. Srujan Reddy⁴, B. Akshay⁵ Assistant Professor, Department of Computer Science and Engineering² Students, Department of Computer Science and Engineering^{1,3,4,5} VNR Vignana Jyothi Institute of Engineering and Technology, Hyderabad, Telangana, India

Abstract: Thousands of video recordings are created and shared on the internet every day. It is becoming increasingly difficult to spend time to watch such videos, which may take longer than anticipated, and our efforts may go in vain if we are unable to extract meaningful information from them. Summarizing transcripts of such videos helps us to quickly search for relevant patterns in the video without having to go through the entire content. Abstractive transcript summarization model is very useful in extracting YouTube video transcripts and generates a summarized version. An automatic summarizer's purpose is to shorten the time of reading, enable easier selection, be less prejudiced compared to humans, and portray content that is compressed while preserving the important material of the actual document. Extractive and abstractive approaches are the two most common ways to summarise text. Extractive approaches choose phrases or sentences from input text, whereas Abstractive methods generate new words from input text, making the task much more difficult.

Keywords: Transcripts, Text Summarization, Natural Language Processing, REST API, Chrome Extension.

REFERENCES

- [1]. Alrumiah, S. S., Al-Shargabi, A. A. (2022). Educational Videos Subtitles' Summarization Using Latent Dirichlet Allocation and Length Enhancement. CMC-Computers, Materials & Continua, 70(3), 6205–6221.
- [2]. Sangwoo Cho, Franck Dernoncourt, Tim Ganter, Trung Bui, Nedim Lipka, Walter Chang, Hailin Jin, Jonathan Brandt, Hassan Foroosh, Fei Liu, "StreamHover: Livestream Transcript Summarization and Annotation", arXiv: 2109.05160v1 [cs.CL] 11 Sep 2021
- [3]. S. Chopra, M. Auli, and A. M. Rush, "Abstractive sentence summarization with attentive recurrent neural networks," in Proc. Conf. North Amer. Chapter Assoc. Comput. Linguistics Hum. Lang. Technol., June 2016, pp. 93–98.
- [4]. Ghadage, Yogita H. and Sushama Shelke. "Speech to text conversion for multilingual languages." 2016 International Conference on Communication and Signal Processing (ICCSP) (2016): 0236-0240.
- [5]. Pravin Khandare, Sanket Gaikwad, Aditya Kukade, Rohit Panicker, Swaraj Thamke, "Audio Data Summarization system using Natural Language Processing," International Research Journal of Engineering and Technology (IRJET) Volume 06, Issue 09, [September - 2019], e-ISSN: 2395-0056; p-ISSN: 2395-0072.
- [6]. Hugo Trinidad and Elisha Votruba, "Abstractive Text Summarization Methods"
- [7]. Prof. S. A. Aher, Hajari Ashwini M, Hase Megha S, Jadhav Snehal B, Pawar Snehal S, "Generating Subtitles Automatically For Sound in Videos," International Journal of Modern Trends in Engineering and Research (IJMTER) Volume 03, Issue 03, [March – 2016] ISSN (Online):2349–9745; ISSN (Print):2393-8161
- [8]. Aiswarya K R, "Automatic Multiple Language Subtitle Generation for Videos," International Research Journal of Engineering and Technology (IRJET) Volume 07, Issue 05, [May - 2020], e-ISSN. 2395-0056, p-ISSN: 2395-0072.
- [9]. Savelieva, Alexandra & Au-Yeung, Bryan & Ramani, Vasanth. (2020). Abstractive Summarization of Spoken and Written Instructions with BERT.
- [10]. Patil, S. et al. "Multilingual Speech and Text Recognition and Translation using Image." International journal of engineering research and technology 5 (2016): n. Pag.

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- [11]. S. Sah, S. Kulhare, A. Gray, S. Venugopalan, E. Prud'Hommeaux and R. Ptucha, "Semantic Text Summarization of Long Videos," 2017 IEEE Winter Conference on Applications of Computer Vision (WACV), 2017, pp. 989-997, doi: 10.1109/WACV.2017.115.
- [12]. A. Dilawari and M. U. G. Khan, "ASoVS: Abstractive Summarization of Video Sequences," in IEEE Access, vol. 7, pp. 29253-29263, 2019, doi: 10.1109/ACCESS.2019.2902507.
- [13]. Lin, Chin-Yew, "ROUGE: A Package for Automatic Evaluation of Summaries," In Proceedings of 2004, Association for Computational Linguistics, Barcelona, Spain.