Ideation Phase
Literature Survey

Date	03 October 2023
Team ID	NM2023TMID01980
Project Name	Subscribers Galore: Exploring the World's Top YouTube Channels

2.1 "CUSTOMIZED CRITERIA BASED TRENDING ANALYSIS FOR YOUTUBE PLATFORM" BY KHIN THAN NYUNT; NAW THIRI WAI KHIN (2023)

In today's tech-savvy world, individuals frequently turn to direct applications and online platforms to access YouTube. Moreover, with the surging number of YouTube users in the United States, the opportunities for earning a livelihood through YouTube have also witnessed a remarkable upswing. However, many aspiring YouTubers are grappling with the challenge of selecting the right YouTube career path. It's not easy to determine which category and channel are currently in vogue and most suitable among the plethora of options available. Knowing the most popular categories and channels can significantly aid users in making informed career decisions and increasing their chances of becoming successful YouTubers. As a solution to this dilemma, the concept of YouTube Trending Analysis has been introduced. This analysis leverages Pearson's Correlation Method to identify the careers that are presently on the rise in the United States, based on the parameters of each video's content. This is particularly beneficial for individuals who are uncertain about their career choices and aspire to use YouTube as a means of livelihood.

2.2 "AN OPEN-SOURCE WEBSITE AND YOUTUBE CHANNEL FOR EMBEDDED SYSTEMS EDUCATION" BY PRAMOD ABICHANDANI; DEEPAN LOBO; CHRIS BERRY; VAISHALI PARIKH; WILLIAM FLIGOR; WILLIAM MCINTYRE (2021)

The purpose behind the establishment of MATLABArduino.org and its affiliated YouTube channel is to offer free, high-quality video content demonstrating the application of two powerful technologies, MATLAB and Arduino. These videos showcase how these technologies can be used for data-driven tasks in embedded systems education. The

primary goal of this initiative is to enhance student engagement in engineering by making use of affordable hardware, real-time visualizations to clarify complex concepts, and straightforward instructional videos. This paper provides a

comprehensive overview of the video content produced as part of this educational project. Furthermore, it delves into the viewership patterns of the YouTube channel to provide insights into video engagement and the demographics of the viewers. It also conducts a qualitative analysis of the comments left by YouTube viewers, highlighting recurring themes in these comments. The paper concludes by discussing the challenges faced in managing the website and YouTube channel within the context of remote online education for embedded systems. With the growing prevalence of online education in physical computing, it is expected that resources like MATLABArduino.org will play a substantial role in educating engineering students. The insights shared in this paper can serve as a valuable reference for both current and future open educational initiatives in the realm of remote learning for embedded system.

2.3. "YOUTUBE DATA COLLECTION USING PARALLEL PROCESSING" BY JOSEPH KREADY; SHISHILA AWUNG SHIMRAY; MUHAMMAD NIHAL HUSSAIN; NITIN AGARWAL (2020)

Numerous studies have recognized social media platforms as valuable data sources for examining human behaviours and obtaining insights into various events and crises. YouTube, being one of the largest social media platforms, offers a Data API that facilitates the collection of data from YouTube channels and videos, which is highly valuable for such research endeavours. However, the conventional sequential methods for processing YouTube Data API requests are time-consuming. In our research paper, we have introduced an implementation that leverages Python's multiprocessing capabilities to concurrently process YouTube Data API requests. Our experiments have demonstrated that multiprocessing enhances performance by a substantial 400%. These enhancements significantly reduce the time required for computation by utilizing the multi-threaded architecture of the CPU. The volume continuation generated by social media platforms continues to grow, and as more researchers engage in social studies, there is a pressing need to enhance data collection tools. To aid social studies researchers,

we have introduced a parallelized approach to collecting YouTube data. The adoption of parallel processing for YouTube data collection has led to a remarkable 400% reduction in processing time, enabling the acquisition of more data in shorter timeframes. Such performance improvements result in faster data processing and enable research on larger-scale YouTube datasets.

2.4 "INFORMATION AND PROCESS MANAGEMENT OF SUCCESSFUL YOUTUBE CHANNELS" BY ANTONIN PAVLICEK; MARTIN POTANČOK; RADIM ČERMÁK (2020)

YouTube offers a vast array of possibilities for generating video content, with each registered user having the ability to create their own channel for sharing updates and engaging with their audience. Online video provides unique advantages that traditional television cannot match, particularly in terms of personalized two-way communication. This capability is nearly ubiquitous, as it's accessible on hundreds of millions of mobile devices worldwide. Additionally, the video production process has become highly accessible, as it only requires a mobile device for filming, editing, and uploading content. The objective of this article is to present an analysis of publicly available statistical data obtained from the free-to-use platform Social Blade. Our aim is to identify correlations among different categories, upload frequencies, popularity metrics, and view counts. Our initial calculations are quite promising, as we've uncovered intriguing relationships between the total number of subscribers on a specific channel at the time of data retrieval and the average number of uploads on that channel per year at the time of data retrieval. These relationships were examined independently across various types of channels.