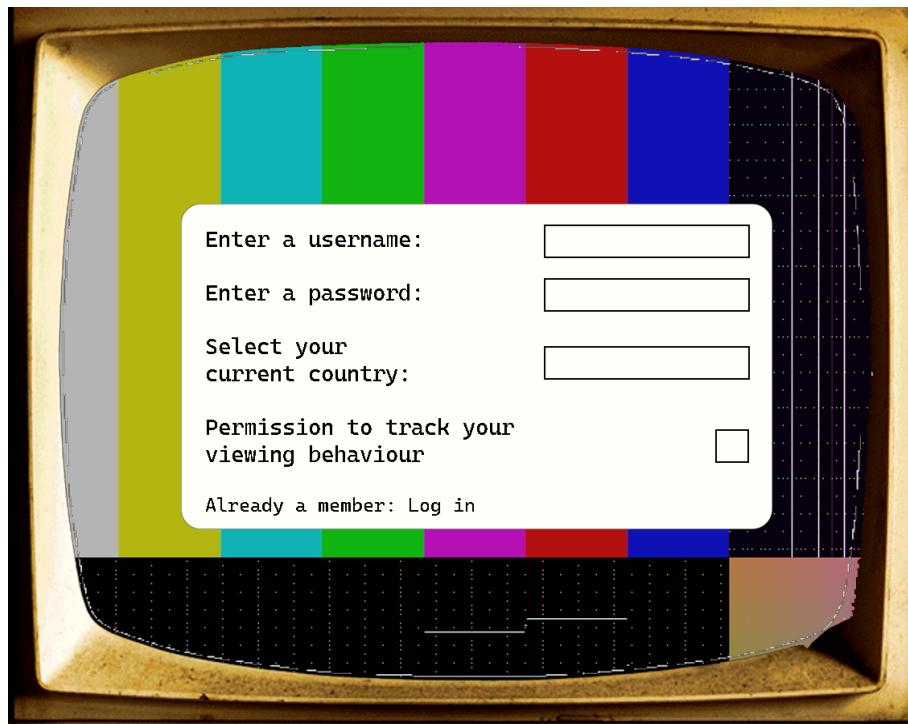


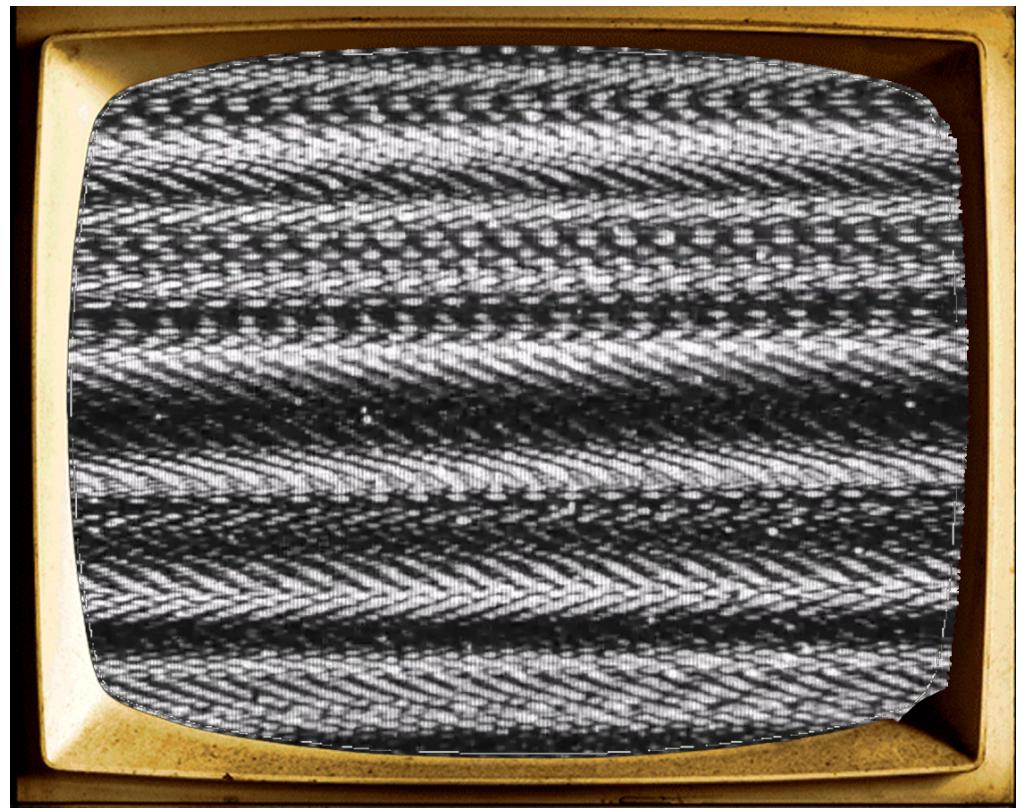
Arman Faruqui  
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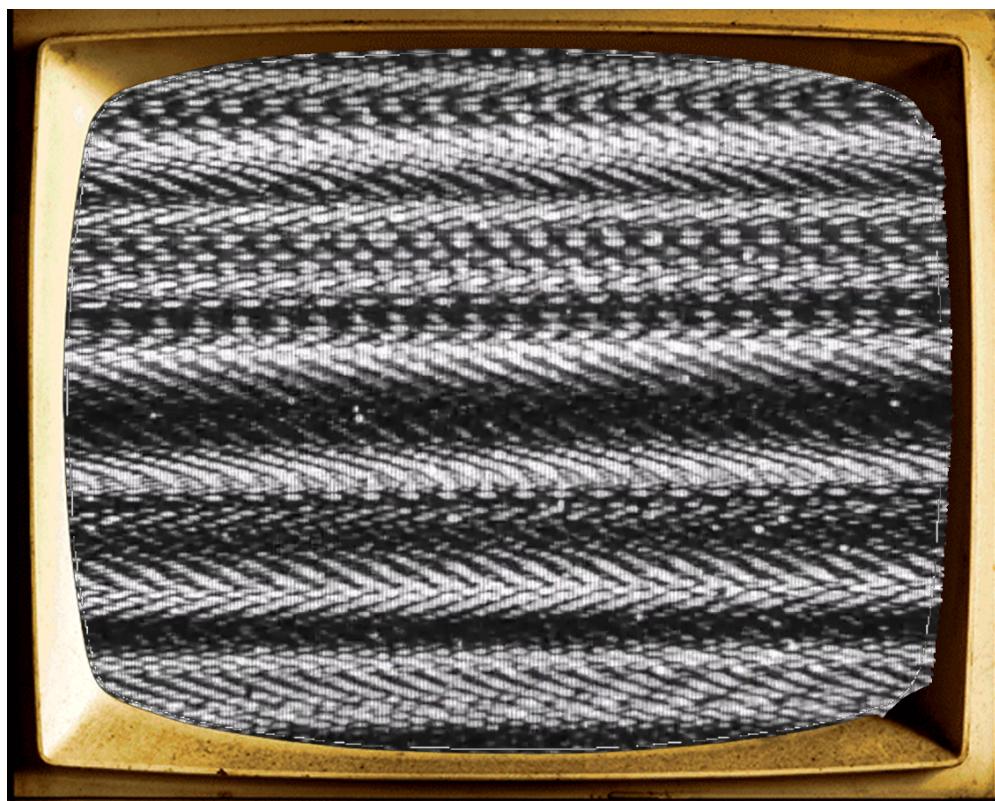
"Consumption exerts enough of an influence on our lives that it becomes part of our identities. We not only use consumption to construct our own identities, but we use it to infer the identities of others. Products represent our identities by the meaning attached to them." <sup>[1]</sup> In this day and age, social media (specifically Instagram and Tiktok), are undoubtedly the products whose content will influence and characterize a generation of humans wired into the global circuitry that is social media. Unlike during the early days of Myspace and Facebook, the content being displayed to users is not determined by their recency or frequency, but instead by a machine learning algorithm. Based on a variety of factors, some of which we aren't even aware of, these algorithms form a profile that identifies the content we are likely to want to see more of. Considering the scale and reach of these algorithms, I find the lack of information available regarding not only how this algorithm works, but who is maintaining and testing them to be quite concerning.

It's not just the opaqueness of this black box that worries me. The nature of a system that tailors what you are exposed to and how it is framed has its own worrying byproducts. It is built to revolve around human confirmation bias; our tendency to seek, interpret and remember new information in accordance with preexisting beliefs. "The fact that social media platforms confirm what we already believe is the reason many people use them in the first place," he says. "If the platforms didn't do that, they wouldn't be successful."<sup>[2]</sup> This encourages the formation of echo chambers, whilst discouraging users' tendency to be exposed to new and unfamiliar information that could possibly expand their knowledge and worldview. This made me think back to when television was my primary source of entertainment. If the few channels that I was most familiar with couldn't grab my attention, I was left with the chaotic expanse of channels from the expanse of what to me was the unknown. Actively having to decipher the contexts, meaning, and purposes of these channels was a task that required involvement but left me with knowledge and or entertainment I would not have otherwise received. Thinking back to those days created quite a strong contrast in my head between the almost surreal experience of hitchhiking through the cable network, and senselessly scrolling through the endless void of content so mind-numbingly familiar, yet novel enough to demand my complete time and attention.

I decided I want to represent what I found most engrossing, charming, and peculiar about cable television by parodying the algorithms that bring order and homogeneity to our social media home pages. Fundamentally, my website/app will allow users to flick through 'channels' of content diverse in nature and origin. The chaotic nature of having to decipher what you're watching will be maintained through a machine learning algorithm that will be trained to understand each individual user's interests and familiarities. However, instead of using that information to order the channels through what they're most like to be familiar and comfortable with, it will actively try to take them out of their comfort zone, and display content that is most likely to bewilder and bemuse them. Aesthetically, I would be going for a 2000s old-school VHS look, in order to visually oppose the sleek and mechanical perfection of modern social media user interfaces. I may artificially add a bit of conventional television static and noise to push this concept further. On the bezel-free devices we use social media on, the content envelops the entire screen, just as it envelops us as it massages its meaning and philosophies into our being. By adding framing the content on my website with the borders of an old-school television, I aim to draw things back a bit.









One project that is conceptually very similar to what I have in mind is called '**Interdimensional Cable**'<sup>[3]</sup>. It is an adaptation of the concept of interdimensional cable from the sci-fi comedy animated series 'Rick and Morty.' In one of their most popular episodes, mad scientist Rick Sanchez introduces his grandson to his latest invention; a cable box that can access television channels from all over the multiverse. The majority of the episode is spent watching nonsensical yet hilarious segments of television channels from different universes that function completely differently from ours. Programmer 'Topotech' made his own rendition of it, where he recreated the chaotic and random nature of interdimensional cable by using a repository of strange and esoteric youtube videos. What I like most about their project is how entertaining it is as a product even without knowledge of its context, creation methods, and technical intricacies; something that I really want my final product to emulate.

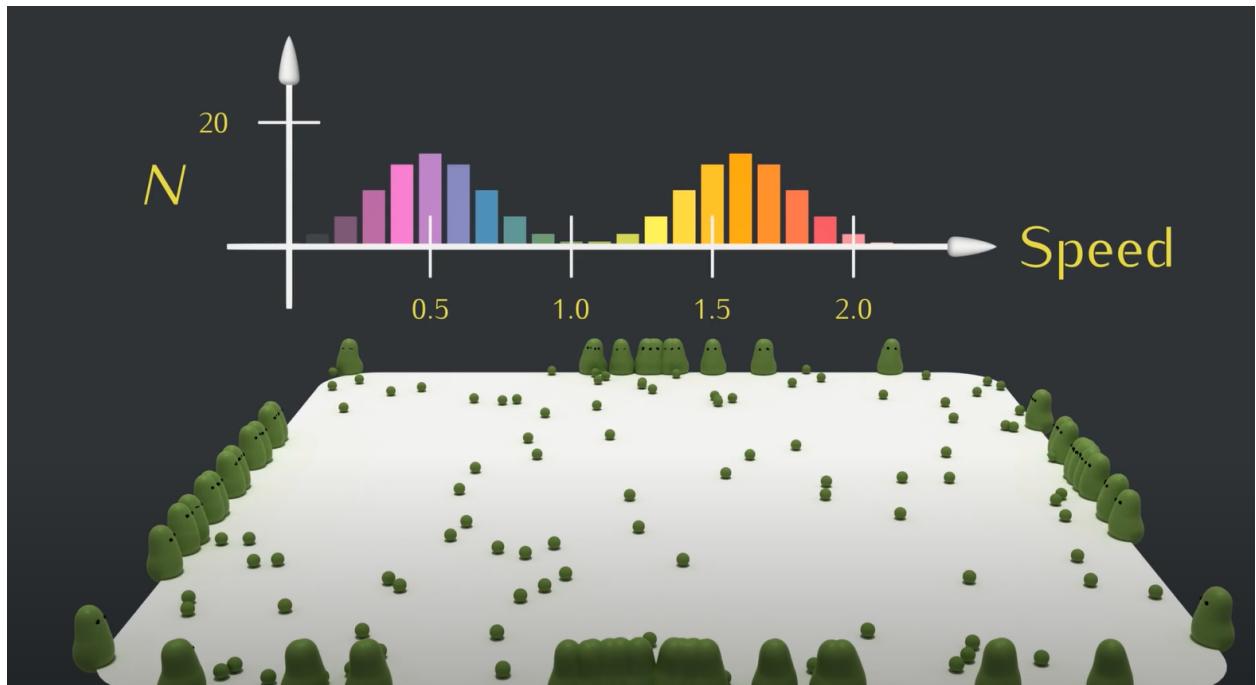
While it is quite similar in concept and functionality to what I have in mind, selecting a random video from a single repository is very different from creating an algorithm that generates a user profile in order to select what channel would be displayed next. Where interdimensional cable is able to create a sense of chaos and disorder by the creator

actively using the strangest and whackiest videos he could find on youtube, I will be aiming to orchestrate a similar feeling for my users by having each channel shown to the user be as distinct in terms of genre and design from each other. Most of the videos on Topotech's creation are intentionally whacky skits done by individuals from the USA. Most of the channels on my creation would be what you could normally find playing on television broadcasts from around the world. The idea I've shown above of a Russian new channel being changed to an episode of Cocomelon is more along the lines of what I am aiming to cultivate.



So if I am not going to be using a preexisting repository of videos from Youtube, how am I going to gather the data required to make this project happen? This is where I want to merge my final project for this class, with my final project for CART-410; research-creation in the arts. I first want to start off by researching as much as I can about how preexisting social media algorithms already function. Besides the few experiments and chunks of information, I will be able to find out about this through researching the internet, I plan to run plenty of experiments of my own in order to try and find patterns myself. By using burner emails to create multiple accounts on Instagram and Tiktok, I will be carrying out my own experiments by actively trying to behave in specific ways to then record and document how the algorithms profile me. I will then try and represent/visualize my findings through vlogs that speculate a narrative instead of text documents and charts since this information

would be extremely qualitative in nature. To give an example to help visualize how I would go about this, I have attached a link to a Youtube video made by the content creator '**Primer**'<sup>[4]</sup>. He makes videos where he simulates real-life theories through code and machine learning algorithms. Even though the code and mathematics behind most of the concepts are quite detailed and complicated, Primer focuses on visualizing and explaining these concepts in layman's terms that even a teenager could understand. I really want the theory and research I do with this project to be accessible and decipherable to even the users that are using the website for purely entertainment purposes. In the example below, Primer is testing the influences of natural selection on a population. Even though all the results from his code is probably just being logged in his console, he still takes the extra step to visualize the results with 3d models instead. Instead of showing the raw code, he breaks it down into easily understandable steps in natural language.



Once this section of research is complete, I will move on to the process of creating my own algorithm based on my findings from that research. I may decide to attempt to replicate patterns I notice, whilst also aiming to create an algorithm extremely distinct in some aspects. What is most important here to me, besides creating a functional algorithm, is to document and question **how** I go about creating this algorithm. How do my preferences, interests, and biases impact the content I choose to include? How does the fact I'm on a university deadline affect how I write my code? Will my complete lack of

knowledge on how to write a machine learning algorithm just end up making it a poorly functioning one, or will it perhaps result in the application of some strange and unique ideas? One of my biggest takeaways from this class has been the need to question the 'who' behind all the algorithms that have become an almost essential part of our lives. I'm not too sure about how holding this lens over myself could result in anything useful or interesting, but it's a precedent I would like to see used by more individuals writing algorithms or maintaining databases.

One project I really appreciate purely for how its creators exude humbleness and self-awareness in their programming and documentation is '**We Feel Fine**' by Sep Kamvar and Jonathon Harris. "The developers wrote code that would go through as many personal blogs to find instances where the writer expressed what they were feeling by extracting sentences that included the word/phrase "feel" or "feels like". This resulted in the formation of a database with almost 12 million human feelings collected from over 3 years of personal blogs on the internet. By visualizing this data and drawing different statistics from it, the developers had managed to build "a comprehensive contemporary portrait of the world's emotional language." Personally, if I had come up with and executed an idea this brilliant, I would have claimed to have found the key to human emotion that psychologists had been searching for during the entire course of civilization. Instead of following that hypothetical path of letting their ego hamper the integrity of their findings, the developers chose to emphasize the deficiencies that held their project back from being a completely 'scientific' body of work. They pointed out the population bias of their data sources, the fact that it is still a work in progress, their lack of manipulation experiments, and the fact that they did not use different methods to generate data and validate their hypotheses. Reading that encouraged me to want to focus more on highlighting my shortcomings and difficulties, instead of trying to market my final product as if I were trying to sell it.

## References

- [1] <https://www.psychologytoday.com/ca/blog/sold/201309/we-are-what-we-consume>
- [2] <https://www.wired.com/story/facebook-twitter-echo-chamber-confirmation-bias>
- [3] <https://topotech.github.io/interdimensionalcable/>
- [4] <https://www.youtube.com/watch?v=0ZGbIKd0XrM&t=158s>