Mert Can Cakmak, "Evaluating Bias and Fairness in AI: An Analysis of YouTube's Recommendation Algorithm and its Impact on Geopolitical Discourse," submitted to SNAM, 2024

This could have implications for the overall user experience and the perception of narrative content, pointing to the need for further investigation into how these algorithms might influence content consumption and user's' emotions.

These findings illustrate a clear correlation between the engagement metrics and the previously discussed drift patterns in both emotions, sentiments, and topics.

Moreover, Shaik (2024) explored how multimedia content influences viewer engagement during social movements, which is relevant for analyzing biases in YouTube's algorithm. Their focus on the strategic use of images and videos in political protests provided insights into how YouTube might similarly manipulate content visibility to drive engagement and shape public perception.

To uncover potential biases, **∓**this study delves into the fairness of YouTube's recommendation algorithm by exploring how it processes two contrasting geopolitical narratives to uncover potential biases and theits varied responses to the different content types.

Despite addressing the same overarching issue, these narratives elicit contrasting cognitive responses from the audiences.

Shadi Shajari and Ridwan Amure, "Navigating the Anomalies: A Comprehensive Analysis of YouTube Channel Behavior," extension of ASONAM 2023 submission, 2023

Authors in [5] highlighted the prevalence of problematic content on the platform, including disturbing videos for children, misogynistic content, and pseudoscientific misinformation, and the role of the recommendation algorithm in theirits- dissemination.

Research on YouTube engagement behavior has identified several key factors. According to [3], more evenly interactive commenters and creators who reply to comments and present reactions can increase their video engagement.

Cosine similarity wasis calculated between an active channel and each suspended channel, resulting in an array of similarity scores. To obtain a single, representative anomalous score for each active channel, we calculated the average and maximum of all the similarity scores in the array.

Sayantan Bhattacharya and Diwash Poudel, "Ablation Studies in Protest Networks: The Role of Influential Agents in Shaping Protests," submitted for SBP-BRiMS 2024, 2024

Recent literature explores social media's role in shaping social movements' agendas and aiding collective action online and offline. It highlights the shift to digital media and increased public engagement, with social media multimedia reporting ever social networks contributing to organizational routines.

IUsing images and videos enhances the persuasive power of collective action campaigns.

Shadi Shajari, "Detecting and Measuring Anomalous Behaviors on YouTube," submitted to ASONAM 2024, 2024

Figures 6, 7, and 8 sequentially present the commenter activity for the channels "Towards Etenity", "Invoice Indonesia", and "Daftar Populer".

Additionally, within the channel "Towards Eternity" as a most anomalous channel, mob behavior is evident, with a group of commenters increasingly posting comments over a specific time period...

Our approach employs a network analysis-based method, utilizing 20 network structural features to generate an anomalous score...

Additionally, the total comments and the total number of commenters in the network emerge as crucial indicators of each channel's possible anomalous's nature.

In addition, other important features that delved into the clique network's structure and connectivity were explored, including the average degree of cliques and clustering coefficients within cliques, etc., were explored.

In this section, we study the properties of the co-commenter network, exploring features that can provide insights into the network structures, relationships, patterns within the network, and dynamics of the network, and any other interconnection behaviors.

In another study, [7] delved into the escalating toxicity within YouTube channels, noting heightened toxic behavior among anti-NATO commenters and, stressing the imperative of addressing and understanding online toxicity.

Mert Can Cakmak, Selimhan Dagtas, and Diwash Poudel, "Unveiling Bias in YouTube Shorts: Analyzing Thumbnail Recommendations and Topic Dynamics," submitted to SBP-BRiMS 2024, 2024

To answer these questions, up--to--date topic modeling and content generation techniques were utilized.

Mert Can Cakmak, "Recommendation Bias and Content Drift in YouTube Shorts: The Role of Watch Time and Content Favoritism," submitted to HICSS 2025, 2024

In this work, we analyzed the YouTube recommendation algorithm, specifically focusing on YouTube Shorts videos and, using generative AI and statistical methods to identify potential bias and drift in recommendations.

However, even when political politics-related topics appeared, they were likely more general and engaging videos...

We generated the relevances for title and transcriptions only. We didn't do it for descriptions because, as we mentioned earlier, descriptions werewas missing for from most of the videos. ASo at the end we had four levels of relevance levels.

This section presents the findings from our generative AI analysis of YouTube Shorts recommendations, and focuses focusing on relevance, topic distribution, emotion trends, and statistical significance of drift.

The goal here was here to see what is happenshappening after each recommendation toon relevance levels...

Sayantan Bhattacharya, "Decoding Digital Dissent through Focal Network Structures," submitted for CNA 2024, 2024

Social movements are complex phenomena that shape our world's political and social landscape. Understanding the dynamics, structures, and discourses is crucial for comprehending their development, impact, and outcomes.

Existing influence assessment models aim to identify the smallest possible influential structures within a network...However, there is a need the need is to identify key sets of users—whether they are...

CFSA was developed to identify influential focal structures that can affect large-scale social processes and to reveal their context.

To handle any non-English posts, we utilized the Google Translate API for translation-purposes.