

# International Conference on Nurturing Sustainability through Innovations in Science and Technology for Global Welfare



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## Recommendation System for Short Videos: An Overview

In this project we would go through Recommendation System for Short Videos. Many modern web-based platforms is to maximize business KPIs or user pleasure by presenting users with sorted lists of recommendations. Users of social media have been spending a lot of time on Short Form Video (SFV) platforms in recent years. Promising solutions for tailored content recommendation have emerged in response to the rapid advancements in machine intelligence. In order to mitigate the semantic gap when recommending videos based solely on visual characteristics, video recommendation has become increasingly important. various methods that help the created applications to recommend SFV. We pre-process the videos to remove any observed noise, passing the videos through various algorithms like motion adaptive gaussian denoising filtering, visual features extraction and content-based filtering, Monte-Carlo Sampling method. EmoWare helps in capturing the emotion of the user and recommend videos or short videos accordingly - works based on the study of the emotion and scaling the factors like joy, surprise, lip stretch etc scaling from 1 to 100. This involves integrating bidirectional RNN and Reinforcement learning (RL) for context-ware sequence learning, along with continuous emotional annotation, implicit feedback mechanism and dynamic mood-based recommendation with emotional intensity filtering. Unlike traditional platforms, users keep scrolling instead of stopping at individual posts. Existing models based on user position in the feed or past interactions aren't effective. Positional model proposes a new model that considers users having a "scrolling budget" - a limited amount of scrolling they're willing to do. This budget follows a specific pattern, and the model uses it to estimate how likely users are to see specific content in the feed. This approach is claimed to be more accurate than existing methods and could improve recommendation systems for these platforms. The inability of legacy bitrate adaption algorithms to distinguish between the weights of videos in the list based on user choices results in the waste of bandwidth when downloading videos that consumers quickly skip without being displayed. RecDASH, a bitrate adaptation approach, is utilized to get around this issue.

Keywords: Short-Video recommendation, Positional bias, Legacy Bitrate, Multitask Ranking System, EmoWare.

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