

YouTube Reinforces Emotional Preferences

Auditing YouTube's Recommendation Algorithm with Agentic Bots

Hussam Habib, Rishab Nithyanand.

It is expected, in many ways, that an “engagement optimizing” recommendation algorithm will reinforce preferences. But are all kinds of preferences reinforced? If users engage with content through emotions, do curations algorithms reinforce those as well? Is this reinforcement consistent (or intensified) across different contexts and time?

Sock-puppet audit with 560 YouTube accounts, each assigned an emotional preference and topical seed, greedily choosing highest-utility Up Next videos via transcript analysis.

Yes. Emotional preferences, especially high arousal negative preferences show reinforcement over baseline. Surprisingly this is stronger in contextual than personalized recommendations, increasing with interaction and appearing even on unrelated videos.



Should this happen? Should watching “angry” gaming videos influence “angry” recommendations within news contexts?

