Philosophy and Artificial Intelligence Final Exam

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In today's world, users interact with recommender systems (RSs) on a regular basis. This paper will focus on two types of techniques: content-based and collaborative filtering. Furthermore, understanding the ethical concerns that may arise from these and discussing alternative ways of designing RSs (or regulating their use). It is important to point out that RSs act within a multi-stakeholder environment (Milano et al.). Hence depending on the platform, the overall goal of a recommendation may differ. For example, in e-commerce applications, a "good" recommendation will result in a purchase of that item, while in social media platforms, the goal of their recommendations is to keep the user engaged.

The concerns that arise from the interactions with RSs are many, especially when regarding privacy and social impact. Let's consider, for example, a user's experience on social media. As previously mentioned, the goal of these platforms is to keep the user engaged for as much time as possible. Through content-based filtering, RSs will continuously provide content with which the user would self-identify. If an individual identifies with something, whether it is beliefs, hobbies, sexual orientation or identity in general, their interest increases. However, the lack of being exposed to different ideas will continue to place people into categories, reinforcing their own biases and damaging their ability to participate in public debates, hence increasing ignorance and shielding them from the opportunity to learn (Bozdag E). This negatively affects social utility (Milano et al.). On the other hand, many online platforms are used as a place to relax and disconnect from the real world, thus it can be argued that algorithmically categorizing users can overall prevent online conflict, as these would mainly interact with like-minded people. While, algorithmic profiling, could avoid conflict, it can still deeply disrupt an individual's experience with personal identity. This is because the recommendations themselves are also biased. These are vulnerable to targeted political propaganda which further increases the issue of polarization and manipulation of the public (Milano et al.).

An option that can be implemented to alleviate this issue is a user-based approach to the configuration of recommendations (Paraschakis D). Letting the user decide whether they would like to be exposed to different perspectives. "TikTok" for example from the start, asks each individual to select a range of content and topics that they enjoy. It is interesting to ponder upon what would happen if instead, they were asked to select a range of topics they would appreciate learning more about (Reviglio U).

The other concern that will be discussed is Privacy and the risks that arise from interactions with RSs. The main issue is that there is too much informational segregation and not enough informed consent regarding what occurs with the data that is being collected to train these systems. For example, personal data may be leaked to external agents both when it is collected and when it has been stored (Milano et al.). If that is the case, this would be a violation of a person's rights and a loss of utility and trust. Perhaps, a user-based approach could also be used to avoid these risks. Platforms could offer explicit privacy controls, letting the user decide how much to share. While this approach would increase trust, it would shift the responsibility and burden on certain users, for example, the

older generation (Paraschakis D). Nonetheless, it still holds that recommender systems are in many domains. Thus, for example, letting an RS collect user's data on medical research, could be beneficial for that user in the long run.

One of the ethical frameworks that could be used to assist in the regulation of RSs is *Utilitarianism*. It is fair to argue that, while RSs have some positive consequences on users, their main aim is to generate some type of profit, whether it is engagement or money. Moreover, there are many more ethical concerns regarding these approaches (that are above the scope of this paper). In simple terms, *Utilitarianism* focuses on the consequences of actions. Hence, because RSs have so many negative consequences on society, it makes, to a certain extent, the action (the RS technique) wrong. If these systems become more user-centred and architectures to store data improve, there would be more transparency, freedom and trust within interactions with RSs and many risks could be avoided.

References

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