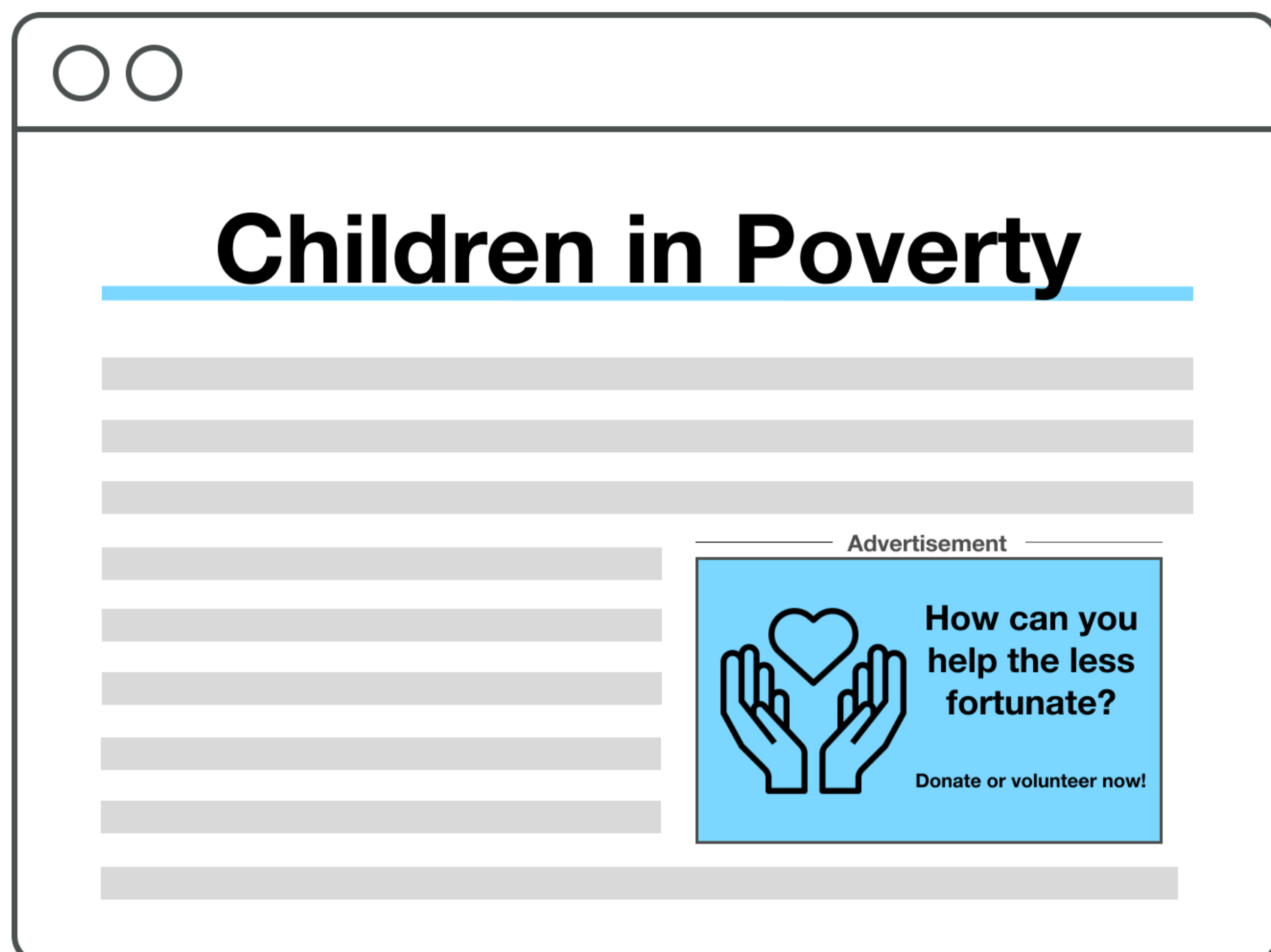


Responsible Personalization of Advertisement on News Websites

Media Futures

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Abstract

Online advertising plays a crucial role in the digital landscape, yet it often falls short of delivering a meaningful and engaging experience for users. This thesis aims to improve online advertising by selecting ads that are relevant to the user as well as to the content the user is viewing. Personalizing online advertising could benefit both the user and the owner of the ads. The ad owner would not have to waste resources on showing their ads to uninterested users. The user would be shown ads for products they are interested in and might also be introduced to new products they want to explore.

Suppose a user is shown an ad for expensive luxury cars while reading a news article about poverty and famine. The user might find that combination distasteful and could form a negative opinion of the parties involved, i.e., the newspaper and the car company. Showing the user ads that are more relevant to the viewed content will therefore benefit the newspaper, the owner of the advertisement, and the user. In the case of a news article about poverty and famine, it would be more appropriate to show the user an ad for UNICEF or Doctors Without Borders.

Research question

1. How can we recommend ads that will responsibly match the user's preferences and the news content?
2. How can personalized advertisement enhance the user experience on news websites?

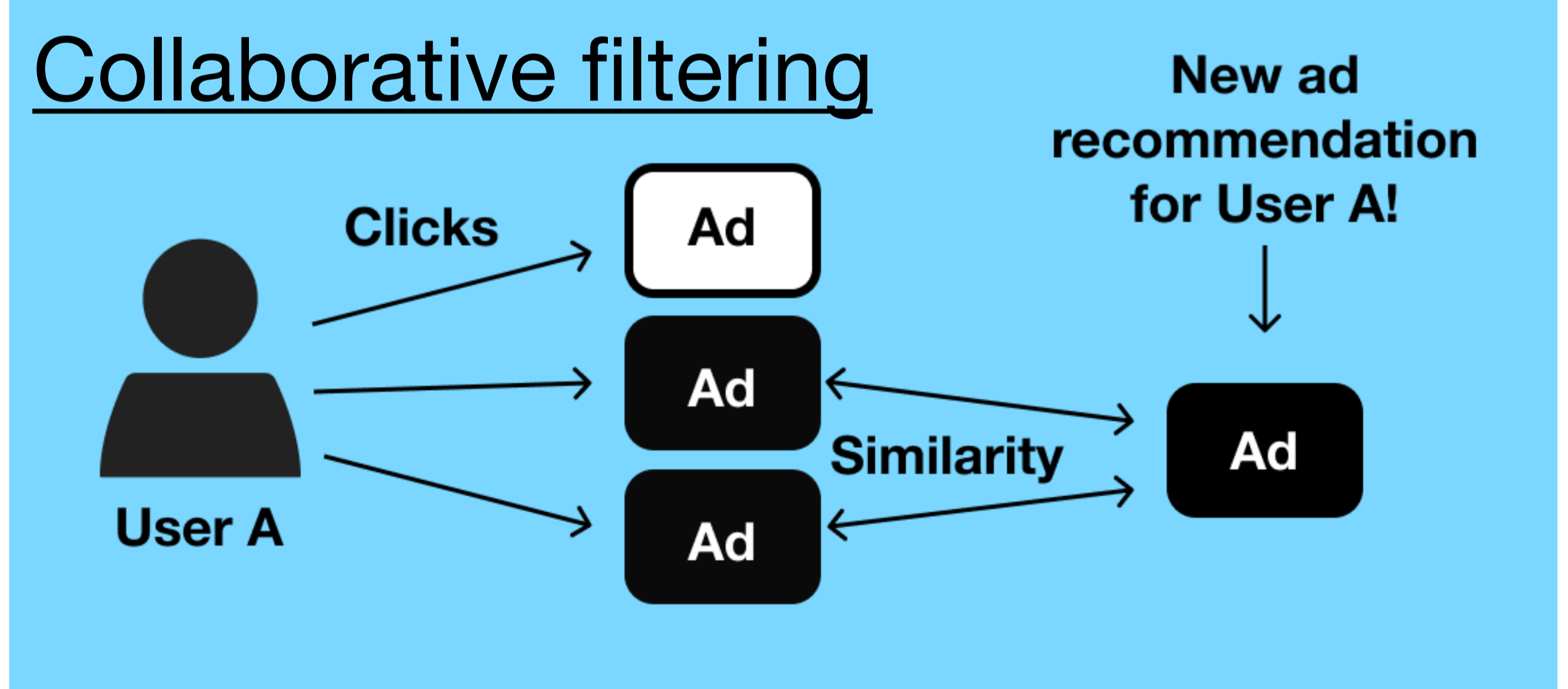
Method

This master thesis work is conducted in collaboration with Amedia, an industry partner of the MediaFutures, that shared the data and offered mentorship for this project.

By using the data collected from one of Amedia's newspaper websites, I will develop a system that recommends appropriate ads according to the user and news content. Initially, the recommender will primarily use item-based collaborative filtering techniques, but as I progress, the system will be enhanced to personalize the recommendations even further.

During the development of the system, I will use several offline evaluation methods for assessing the performance of the system, including cross-validation and measuring the precision and recall.

The main goal of this thesis is to make online advertising more user-centric, effective, and contextually aligned with the content users consume. By doing so, we hope to create a more engaging, personalized, and responsible online advertising experience for all stakeholders involved.



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