

Boosting Debated Topics

Thema:

Expanding Horizons: Utilizing Boosting to Encourage Diverse Opinion-Forming

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Hintergrund

Engaging in discussions on controversial topics often occurs on social media platforms (Garimella et al., 2017). Initially, individuals need to gather information from search engines like Google or Bing to form an opinion. However, the way search results are ranked and presented on SERPs can influence user interactions and search outcomes. A lack of exposure to different perspectives harms opinion formation and decision-making (Azzopardi, 2021; Phillips-Wren & Adya, 2020), potentially leading to an increase in polarization and extremism (Hills, 2019; Lilienfeld et al., 2009). Two approaches, nudging and boosting, aim to address this issue (Hertwig & Grüne-Yanoff, 2017). Nudging involves modifying the search engine system to change user behavior, while boosting provides supplementary information to enhance users' competencies (Hertwig & Grüne-Yanoff, 2017; Lorenz-Spreen et al., 2020). Although nudges have been demonstrated to have a positive impact on users' search outcomes, there is a perspective that views them as paternalistic, potentially limiting users' autonomy and undermining their ability to make independent choices (Lorenz-Spreen et al., 2020; Hertwig & Grüne-Yanoff, 2017). Consequently, boosting presents an approach that respects users' autonomy while equipping them with adequate information that has the potential to enhance search outcomes. Boosting has shown effectiveness in improving search outcomes and addressing challenges like microtargeting (Lorenz-Spreen et al., 2021), ensuring privacy preservation (Ortloff et al., 2021), and mitigating confirmation bias during search (Rieger et al., 2021). Given these positive effects, it is worth exploring whether the benefits of boosting extend to the context of web search in the domain of debated topics.

Zielsetzung der Arbeit

The goal of this research is to identify whether boosting approaches help users in forming opinions on debated topics. Specifically, various boosts are assessed and compared to each other and a baseline (without a boost) in terms of factual knowledge gain (measured through pre/post comparisons). Moreover, interaction patterns are observed and compared to a baseline. A successful implementation of boosting should encourage users to interact with more search results, thereby increasing their knowledge on the debated topic, while minimizing the influence of system and cognitive biases.

Konkrete Aufgaben

1. Define research questions and hypotheses
2. Conduct a literature review to ground the research in
3. Design boosts with information that is grounded in literature both in content and visual appearance
4. Conduct controlled study
5. Analyze and Interpret the data gathered in the study

Erwartete Vorkenntnisse

Keine

Weiterführende Quellen

- Azzopardi, L. (2021). Cognitive biases in search: A review and reflection of cognitive biases in information retrieval.
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- Lorenz-Spreen, P., Geers, M., Pachur, T., Hertwig, R., Lewandowsky, S., & Herzog, S. M. (2021). Boosting people's ability to detect microtargeted advertising.
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- Phillips-Wren, G., & Adya, M. (2020). Decision making under stress: The role of information overload, time pressure, complexity, and uncertainty.
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