

# Creator-driven Auditing of YouTube Algorithms

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## 1 STATEMENT OF RESEARCH INTEREST

In recent years, there has been a notable trend where end-users engage in investigating potentially harmful algorithmic behaviors or disagreements they experience in daily interactions [5, 6]. In creator economy platforms, creators have been actively participating in algorithmic auditing, particularly in addressing issues of algorithmic demonetization or moderation — which naturally elicits high user engagement and voluntary participation as they are closely related to creators’ interests. For instance, Kingsley et al. observed that several creators utilized specific techniques to audit YouTube’s algorithms, aiming to uncover potential causes behind the demonetization of videos featuring LGBTQ people, culture, or social issues [4]. To support creators’ anecdotal evidence of algorithmic bias, researchers conducted a large-scale algorithmic auditing study to enhance transparency in YouTube’s monetization algorithms as well [3]. Understanding the algorithms’ mechanisms and potential problem areas has become increasingly vital for content creators, given the algorithm’s significant influence on creators’ profits and livelihood [2].

In our previous work [1], we delve into the creators’ process of folk theorization and their experiences in everyday auditing of the YouTube recommendation algorithm, facilitated through semi-structured interviews (N = 14). We observed that creators continuously tried to understand and analyze the algorithm’s decisions by running real-time experiments on their channels. However, these efforts were often unstructured, not cost-effective, and not concrete enough to support their decision-making on future creative activities. Consequently, during our participatory design workshop, creators indicated their need to avoid basing their strategies on guesses or assumptions about the algorithm’s behavior. They suggested interactive tools— an ‘algorithmic test board’ to simulate the potential algorithmic impact on their videos before releasing them. Overall, while algorithmic auditing is casually conducted among high-stakes users, such as professional content creators, there is a growing need for more structured support to effectively leverage algorithmic auditing for their success and sustainable careers.

In this workshop, I aspire to foster discussions on leveraging the results of end-user algorithmic auditing to benefit the end users, which can organically enhance high-stakes users’ engagement and motivation for the auditing process. For instance, an interactive system for simulating real-time algorithmic decisions would enable creators to understand the outcome of the algorithm better, which would lead to empowering the creators to have a shared understanding of algorithms with evidence-based discussions, enhancing solidarity between creators.

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