

Web Search Personalization and Political Polarization

There are popular concerns that the internet is a major driving force behind increasing political polarization, as citizens are increasingly likely to solely consume information from like-minded sources, fueling their prejudices and grievances. We design a field experiment based on 'bots' (programs that simulate internet users) to test whether and how the algorithmic personalization of web search results can lead to online segregation and political polarization. Like human users, each bot has its own browser fingerprint, residential IP address, and browser settings. In the experiment, we initiate a sample of several hundred bots and randomly treat bots with varying political preferences and varying degrees of privacy affinity (which privacy invading technologies bots block when browsing, e.g., cookies). While the bots are building up browsing and search histories over several weeks, we test (i) whether bots using the exact same search terms get systematically different search results, (ii) whether these results are politically flavored (in line with the bots' political preferences) and (iii) to what degree a potential political bias in the search results is diminished by the bots' privacy affinity.