Annotated Bibliography

1) The 3 Types of Search Queries & How You Should Target Them

In "The 3 Types of Search Queries & How You Should Target Them," the author categorizes search queries into three types: navigational, informational, and transactional. Navigational queries are searches to find a specific website or webpage, such as "YouTube" or "Facebook." Informational queries cover broader topics and are intended to answer questions or provide knowledge. The author notes that Google's "Knowledge Graph" attempts to provide answers directly. To succeed in informational searches, the author suggests positioning oneself as a trustworthy and authoritative source. Transactional queries indicate an intent to complete a transaction, often including local and vertical searches specific to industries like restaurants, hotels, and flights. The article also offers various tactics to optimize content for these different types of search queries, emphasizing the importance of catering to search engine algorithms.

2) Is local search inherently transactional?

In the article "Is Local Search Inherently Transactional?", the author explores the relationship between search engine bias and localized transactional searches. The author uses examples such as searching for the opening time of the Post Office and the location of the Space Needle in Seattle to illustrate how Google's Local Pack feature answers these queries directly. They also point out that although searcher intent may not always be transactional, Google is interested in promoting transactions. This results in Search Engine Results Pages (SERP) features reflecting Google's interests, as exemplified by the user's search for tacos, which prioritizes convenient locations for immediate consumption rather than any historical context.

3) Ranking Results – How Google Search Works

In "Ranking Results – How Google Search Works," Google explains how its search algorithms sort through billions of web pages to provide the most relevant and useful results within a fraction of a second. Factors considered include query words, relevance and usability of pages, the expertise of

sources, and user location and settings. The process involves sophisticated steps such as recognizing and correcting spelling mistakes, understanding synonyms, and accounting for different meanings of words. To ensure quality and usability, the algorithms assess content based on expertise, authoritativeness, trustworthiness, mobile-friendliness, and page load speed. Lastly, the search results are tailored based on user context and settings, such as location and search history. The article highlights the need for a verification system and suggests potential areas for critique.

4) [Do Unbiased Search Engines Exist? Top Alternative Search Engines to Consider - Neeva](#)

This source emphasizes that search engines are inherently biased, as they selectively present information based on criteria such as relevance, engagement, and ad revenue. The article provides examples of biases in search results, such as advertising-driven sites outranking government sources or sponsored product reviews dominating search results. It also discusses the location and search history biases and efforts to combat offensive content. Furthermore, the article explores alternative search engines, including anonymous, meta search, and private options, which offer varying degrees of bias reduction. Despite these alternatives, they claim the challenge of eliminating engagement bias remains pervasive.

5) [A Complete Guide to the Google RankBrain Algorithm](#)

In "A Complete Guide to the Google RankBrain Algorithm," the author explains RankBrain as a machine learning system that evolved from Google's Hummingbird algorithm, transforming the search engine's understanding from "strings" to "things." This shift enabled Google to identify core entities, represented by Machine IDs, and connect them based on their relationships and co-occurrences. RankBrain serves as a pre-screening system for previously unseen queries, considering environmental contexts to provide more relevant search results. The author recommends utilizing the Natural Language Processing API and Knowledge Graph Explorer to optimize content for RankBrain and suggests testing search results across various devices and locations.

6) SEARCH NEUTRALITY AS AN ANTITRUST PRINCIPLE

In "Search Neutrality as an Antitrust Principle," the author argues against the need for search engines to be neutral, positing that a strict neutrality requirement would impede innovation and limit their ability to offer more tailored results. The paper highlights how search engines have evolved beyond the "ten blue links" paradigm, integrating proprietary functions and offering richer results by understanding user intent. The author contends that the monopoly leverage argument is flawed, as search engines are not necessarily dominant when it comes to reaching websites, and users often know where they want to go without searching. The paper suggests that while dominant firms may have special antitrust obligations, these should not hinder their ability to innovate. The piece was somewhat dated and lacked modern nuance.

7) Death of the Yellow Page Directories

In "Death of the Yellow Page Directories," the author examines the decline of traditional yellow page directories and their failure to adapt to the digital age. The yellow pages once served as the primary method for businesses to advertise and gain visibility, as the telephone was the only technology for real-time global communication. The collapse of R.H. Donnelley and similar companies is attributed to their focus on physical expansion while neglecting investment in digital presence and new offerings. The advent of the internet and the rapid growth of search engines led to the demise of these once-essential business directories.

8) Hierarchical Navigation: An Exploration of Yahoo! Directories

This research paper compares the hierarchical navigation structure of Yahoo! directories with keyword searching in a search engine. It reports on a study of how 24 library and information science students used Yahoo! directories to complete a simple task. They examine several issues that emerged from the students' search process, such as citation order of facets, precision vs. recall, and other factors influencing searchers' successes and preferences. They also review previous research on the role of classification in information retrieval and suggest directions for further research. The study reveals the benefits of hierarchical navigation in demonstrating relationships between

topics and suggests it as a viable alternative to keyword searching. However, it also highlights potential limitations, such as requiring knowledge of subject hierarchy and limiting search scope.

9) Understand & manage your location when you search on Google

In the article "Understand & manage your location when you search on Google," the author explains how Google uses an individual's current location to provide relevant search results for Maps, Search, and Google Assistant. The location data is employed to display nearby results, even when the user does not specify a location in their query. If local search results are not displayed, the article recommends including the current location in the search and ensuring that the device sends location data to Google. Additionally, the author notes that past search behavior can influence the estimation of the user's current location, resulting in localized results for subsequent searches.

10)   PROPOSED REMEDIES FOR SEARCH BIAS:

In this 2012 article, the authors discuss the concept of "search bias" in the context of the FTC's investigation into Google's practices. The article examines the remedies proposed by competitors such as Microsoft, Expedia, and Foundem, arguing that they are worse than the perceived problem. The authors emphasize that antitrust law should promote consumer welfare, competition, and innovation, rather than protecting weaker competitors. Proposed remedies include search "neutrality," maintaining the "Ten Blue Links" format, Google-specific fair-use limits, no bidding, and continuous disclosure. However, the authors argue that these solutions are flawed and could hinder technological innovation and dynamic efficiency. The article concludes that the proposed remedies may cause more harm than good for consumers, competition, and high-tech innovation.