Search Mastery Resources

Updated: 1/16/25

Mastering Search Engines

Resource	Date	Description	Topics
Dan Russell's resources: - 2023 seminar at UMD - Website homepage - Book *Joy of Search* - SearchResearch Blog	Current	Russell, a research scientist, studies information-seeking behavior in search engine users and AI	Google, AI, How to Search
Google Advanced Search Operators	2024	A list of all current Google search operator commands, maintained by Dan Russell. Reliable and up-to-date reference.	Google
Moz.com: Mastering Google Search Operators	2017	Comprehensive step-by-step instructions on how to refine searches and use search operators with lots of great examples.	Google
Ahrefs resources - How to Google with Advanced Search Operators (video) - Google Search Operators: The Complete List	2018 (video) 2024 (list)	Video about how to employ Google search operators to refine a search, and a list of all current Google search operator commands. Generally reliable except that "AND" is implied in searches and ignored if specified. Also parentheses () are ignored.	Google
Microsoft Bing Help	Continuously updated	Tutorials on using the features of Bing, not limited to search	Bing

[Microsoft Bing Operators](#)	Continuously updated; most recent changes 2022	List of search operators commands for Bing. Note that these can be occasionally unreliable but many of them work well!	Bing
[Google Searches for Job Hunting](#)	2023	Videos produced by the UMD Search Mastery program applying advanced search practices to job research	Google
[How to Make Your Web Searches More Secure and Private](#)	2023	News article offering privacy-focused alternatives to Google	Google, DuckDuckGo, Brave, Kagi, Startpage, Mojeek, Privacy
[DuckDuckGo vs Google: A deep dive into privacy and performance](#)	2024	A comparison of the pros and cons of Google vs. DuckDuckGo	Google, DuckDuckGo
[Reverse Image Search: Everything You Need To Know](#)	2024	Step by step instructions for 4 major reverse image tools	Google, Bing, Yandex, and Tineye
[Comparison Table of Search Engines](#)	2024	Table by Search Mastery program comparing use and operators of different search engines	Google, Bing, DuckDuckGo
[Google for Education: Digital Literacy](#)	Continuously updated	Lesson plans and activities for educators and families to enhance use of Google products	Google
[Search engines post-ChatGPT: How generative artificial intelligence could make search less reliable](#)	2024	Critique of AI assisted search engines from University of Washington researchers	AI assisted search
Search Mastery Cheatsheets - [Search Engines](#) - [Search Operators](#) - [Search Engine Results](#) - [Evaluating Search Results](#)	2021	One-pagers from UMD summarizing Search Mastery Modules	Google, Bing, Info Literacy

[UMD Search Mastery Speaker Series YouTube Channel](#)	2021-current	Recordings of all previous talks given by search experts as part of the UMD Search Mastery Speaker Series	Google, Perplexity, You.com, Research, Info Literacy, AI
[The Search Engine Map](#)	Regularly updated	A clickable visualization of the relationships between search engines, and which engines power which others including Google, Bing, and Yandex	28 search engines identified by type and source of search results
[#InfoLection2024: Search Mastery and .gov Sites for Election Information](#)	2024	Short video with tips for using search engines to find reliable information about voting	Google

Information Literacy and Evaluating Sources

Resource		Description	Topics
[Artificial Intelligence (AI) and Information Literacy](#)	2023	Resources from UMD Libraries about how AI works and tips for using AI thoughtfully and ethically in an academic setting	AI and AI powered search
[AI and Information Literacy](#)	2024	A guide from UMD's HSHS Library on correct usage of AI tools	AI and AI powered search
[Evaluating Websites: A Checklist](#)	2014	Tool for students to practice analyzing website quality	Info Literacy
[Civic Online Reasoning videos](#)	2019-2020	A curriculum to teach information literacy and analysis of online information	Info Literacy
[Check Please! Starter Course](#)	2019	A curriculum for college students on info literacy and disinformation	Info Literacy
[Calling Bullshit: Case Studies](#)	2019	Case studies for students to analyze examples of bad data	Info Literacy

		analysis and misinformation	
Project CORA	Continuously updated	Open access database of assignments to teach info literacy	Info Literacy
ACRL Info Literacy Sandbox	Continuously updated	Searchable database of knowledge briefs to teach info literacy	Info Literacy
Chucking the Checklist: A Contextual Approach to Teaching Undergrads Website Evaluation	2004	A paper criticizing the use of checklists to teach information literacy and evaluation of web sources	Info Literacy
Why We Need a New Approach to Teaching Digital Literacy	2018	A paper criticizing the use of checklists to teach information literacy and evaluation of web sources	Info Literacy
Crash Course Navigating Digital Information	2018	Video on basics of info literacy and analysis of online information	Info literacy
Five W's of Web Site Evaluation	2003	Checklist for basic understanding of a web source's credibility	Info Literacy
CRAAP Test	2010	Checklist for basic understanding of an info source's credibility	Info Literacy
How to Spot Fake News	2017	Infographic on evaluating source trustworthiness (also available in other languages)	Info Literacy
Hunting for Data – Learning How to Read and Write Web Addresses	2013	Explanation of how URLs work, and how they can be manipulated	Info Literacy
URL and What It Can Tell You	2024	Description of URL structure in the context of lateral reading to verify sources	Info Literacy
Crash Course Navigating Digital Information	2018	Video on basics of info literacy and analysis of online information	Info literacy

Researching, Libraries, and Librarianship

Resource	Date	Description	Topics
Search Better! Open Learning for Public Librarians	2023-2024	Free Open Learning Search Education is available to public libraries in multiple jurisdictions. Email mfranci1@umd.edu for more information created by the UMD Search Mastery team	4 online modules on search practices, search operators, search validation, and other topics for knowledge transfer to patrons
Project Information Literacy	2024	Nonprofit research institute conducting national studies on experience of students in the digital age	Info Literacy, Research
UMD Library Resources for Graduate LIS Students	~2023	Instruction tutorial for Info College students from Rachel Gammons	UMD Library
"Get it Done Guide" from UMD Libraries	2020	Infographics on research basics, library use, and study tips for UMD students	UMD Library