



School of Law
UNIVERSITY OF GEORGIA

Prepare.
Connect.
Lead.

University of Georgia School of Law
Digital Commons @ University of
Georgia School of Law

Continuing Legal Education Presentations

February 1, 2018

Feb 1st, 1:30 PM - 2:15 PM

Searching High and Low: Advanced Search Tips and Tricks

Wendy Moore

University of Georgia School of Law Library, wemoore@uga.edu

Follow this and additional works at: <https://digitalcommons.law.uga.edu/cle>



Part of the [Legal Writing and Research Commons](#)

Moore, Wendy, "Searching High and Low: Advanced Search Tips and Tricks" (2018). *Continuing Legal Education Presentations*. 7.

<https://digitalcommons.law.uga.edu/cle/2018/schedule/7>

This Event is brought to you for free and open access by the Alexander Campbell King Law Library at Digital Commons @ University of Georgia School of Law. It has been accepted for inclusion in Continuing Legal Education Presentations by an authorized administrator of Digital Commons @ University of Georgia School of Law. [Please share how you have benefited from this access](#) For more information, please contact tstriepe@uga.edu.

**Searching High and Low:
Advanced Search Tips and Tricks**

Wendy E. Moore, M.S. in L.S.

Acquisitions Librarian

The University of Georgia School of Law

Law Library

Athens, GA

Searching High and Low: Advanced Search Tips and Tricks

Wendy E. Moore, M.S. in L.S.
Acquisitions Librarian
The University of Georgia School of Law
Law Library
Athens, GA

TABLE OF CONTENTS

INTRODUCTION.....	1
UTILIZING THE ADVANCED SEARCH OPTIONS IN GOOGLE.....	1
ADVANCED SEARCH OPTIONS IN GOOGLE ‘WEB’ RESULTS.....	2
<i>Find pages with</i>	2
<i>Language</i>	3
<i>Region</i>	3
<i>Last update</i>	4
<i>Site or domain</i>	4
<i>Terms appearing</i>	4
<i>SafeSearch</i>	4
<i>Reading level</i>	5
<i>File type</i>	5
<i>Usage rights</i>	5
ADVANCED IMAGE SEARCH OPTIONS IN GOOGLE ‘IMAGES’ RESULTS.....	6
<i>Image size</i>	6
<i>Aspect ratio</i>	6
<i>Colors in image</i>	7
<i>Type of image</i>	7
UTILIZING OPERATORS, PUNCTUATION, & SYMBOLS IN GOOGLE SEARCH.....	7
USING SEARCH OPERATORS TO NARROW RESULTS.....	7
<i>site:</i>	8
<i>link:</i>	8
<i>related:</i>	8
<i>info:</i>	8
<i>cache:</i>	8
<i>Proximity Operator</i>	8
<i>OR Operator</i>	9
PUNCTUATION & SYMBOLS THAT GOOGLE SEARCH RECOGNIZES.....	9

<i>Plus sign</i>	9
<i>“at” sign</i>	9
<i>Dollar sign</i>	10
<i>Pound sign</i>	10
<i>Minus/dash sign</i>	10
<i>Underscore</i>	10
<i>Double Quotes</i>	10
<i>Asterisk</i>	10
<i>Double Period</i>	10
UTILIZING FILTERS IN YOUR SEARCH RESULTS.....	11
USING TYPE OF RESULTS TO FILTER YOUR SEARCH	11
USING TOOLS TO FURTHER FILTER YOUR SEARCH	12
<i>Published date</i>	12
<i>Verbatim</i>	12
<i>Size</i>	12
<i>Color</i>	12
<i>Type</i>	12
<i>Time</i>	12
<i>Usage rights</i>	12
<i>Duration</i>	13
<i>Date</i>	13
<i>Quality</i>	13
<i>Closed captioned</i>	13
<i>Source</i>	13
SEARCHING SPECIFIC GOOGLE DATABASES.....	13
GOOGLE SPECIALIZED SEARCH DATABASES	13
<i>Google Scholar</i>	13
<i>Google Books</i>	15
<i>Google Translate</i>	15
<i>Google Patents</i>	16
<i>Google Finance</i>	17
<i>Google News</i>	17
SWITCHING BETWEEN GOOGLE SEARCH DATABASES & OTHER PRODUCTS	17
OTHER DATABASES FOR SEARCHING	18
<i>Casetext</i>	19
<i>Court Listener</i>	19
<i>Federal Courts Web Archive</i>	20
<i>Govinfo</i>	21
<i>Internet Archive</i>	21
<i>Listen Notes</i>	22
<i>Municode</i>	22
<i>Public Library of Law - PLoL</i>	23

<i>Regulations.gov</i>	23
<i>USPTO.gov</i>	24
ALGORITHMS AND SEARCH RESULTS	25
FIVE SEARCH TIPS TO REMEMBER.....	26
<i>Tip 1. Revise Your Search Sooner, Rather Than Later</i>	26
<i>Tip 2. Utilize the Filters and Advanced Search Options of a Search Engine</i>	27
<i>Tip 3. Read the Search Engine Tips Pages</i>	27
<i>Tip 4. Search Another Search Engine or Database</i>	27
<i>Tip 5. Make Use of Free Add-On Tools Available for a Browser</i>	28
CONCLUSION	29
SOURCES FOR FURTHER LEARNING	29
<i>Books & Articles</i>	29
<i>Google Search Education Online</i>	31
<i>Google Quick Reference Guide</i>	31
<i>Internet for Lawyers</i>	31
<i>LawSites blog</i>	32
<i>LLRX</i>	32

Introduction

We have grown accustomed to having information readily available via the Internet. Searching is easy; so much so, that you can be surprised when the desired information is not retrieved in the first few search results when doing a basic *Google* search. When you are trying to retrieve information needed to conduct business or assist a client, you want to find the best results with the least amount of time spent. A basic *Google* search, while a good place to begin, should not also be the end of your search. This paper gives you search strategies to apply when a basic *Google* search does not produce the results you need.

Utilizing the Advanced Search Options in Google

When a basic search in *Google* fails to produce the results you desire, try making use of the Advanced Search options already built into *Google*. The Advanced Search options make searching easier and your results more relevant. After you have done a basic search, you can access the Advanced Search options in *Google* by clicking on ‘Settings’ under the search box on the search results page. A menu drops down with several options including ‘Advanced Search.’ You can also access the Advanced Search options in *Google* by going directly to the Advanced Search page at http://www.google.com/advanced_search. It is simple to learn these Advanced Search options and to begin applying them to your searching right away. Using Advanced Search options is the single most important thing you can do to improve your

search results. Advanced Search options are available in the ‘All’ results, but also similar variations of Advanced Search are available in the results by type for ‘Images,’ ‘Videos,’ and ‘Books,’ under ‘Settings.’ Listed below are the Advanced Search options available in *Google* for the ‘All’ results and the ‘Images’ results, including a brief description of how they will refine your search.

Advanced Search Options in Google ‘Web’ Results

http://www.google.com/advanced_search

Find pages with...

In a basic *Google* search, the search engine just looks for web sites containing all of the words you have entered in the search box. A powerful feature of Advanced Search options is that it allows you to tell the search engine how to look for your search terms. You can also use any or all of these fields together to craft a very effective search strategy.

- **all the words** – Works just like the basic search, looking for all of the words listed in no particular order, but does make certain that all of those terms appear in each of your results.
- **this exact word or phrase** – Tells the search engine to look for these particular words next to one another just as you have listed them. This feature is the same as enclosing search terms in quotation marks. It can help you also retrieve results for a word that might otherwise be considered misspelled, such as a non-standard spelling of a name.
- **any of these words** – Allows you to list several search terms, but tells the

search engine that you are interested in web sites that include even one of the words listed. This feature allows you to return a wider set of results than you would have gotten from running just a basic search.

- **none of these words** – Eliminates results that you know you do not want. Use this limit when you have run a search already, but then discover that you have retrieved a significant number of results that are on a specific topic that is distinctly unrelated to your subject.
- **numbers ranging from** – Allows you to input two number values to limit your results between those terms. You can use it to look for any usage of numbers such as dates, weights, stock quotes, etc. You can also add units of measure to the numbers in the fields, such as 50 to 75 lbs or \$500 to \$600, or use it for years such as 2011 to 2012.

Language

Google allows you to limit using a ‘Language’ field by using a dropdown menu. Unfortunately, you can only select one language at a time. However, if English is your native/only language you are fluent in, then it is often good to limit your search to English, especially if you are researching a foreign or international topic and you want to narrow your results returned.

Region

You can limit your search results by country of origin for the published website. You can only select one country at a time from a dropdown menu, but it can be helpful if

you are looking specifically for a company, organization, or person from a particular country.

Last update

Also selected from a dropdown menu, the 'last update' field allows you to limit your results to web pages updated 'anytime,' 'past 24 hours,' 'past week,' 'past month,' or 'past year.'

Site or domain

The 'site or domain' field allows you to limit your search to a particular type of web domain, such as .com, .edu, .org, .gov, etc. or to a particular web address, such as uga.edu or georgia.gov. Limiting to a specific domain name essentially creates a *Google* search of just that website.

Terms appearing

Selected with a dropdown menu, you can use 'terms appearing' to return results where the search terms only occur in specific fields of the web page, such as 'anywhere in the page,' 'in the title of the page,' 'in the text of the page,' 'in the URL of the page,' or 'in links to the page.' For example by limiting your search terms to being located in the source title of the webpage, it should improve your results relevancy.

SafeSearch

Google's SafeSearch screens for sites that contain explicit sexual content and

deletes them from your search results. From the Advanced Search page you can for an individual search change from 'Show most relevant results' to 'Filter explicit results.' To change your ongoing 'Search Settings' to always use SafeSearch, select 'Turn on SafeSearch' under 'Settings' click or go to the url: <<http://google.com/preferences>>.

Reading level

Google defaults to having 'no reading level displayed,' however reading level is tracked in search results and can be turned on to display or even used as a limiter. The options under 'reading level' are: 'annotate results with reading levels,' 'show only basic results,' 'show only intermediate results,' and 'show only advanced results.'

File type

Google allows you to limit your results to a specific file format. From a dropdown menu, you can choose the particular type of file format you are looking for. This feature is helpful if you would like to locate information in a specific kind of format, such as limiting the file format to .ppt, so your results will only contain PowerPoint presentations. *Google* once again also allows for the exclusion of particular file formats as well. If you are trying to find a particular file type at a specific website, you can limit the file type search to that specific domain name. An example of this would be noaa.gov filetype:pdf.

Usage rights

The field 'usage rights' allows you to limit your results to items in a range from

‘not filtered by a license’ to those that are ‘free to use, share or modify, even commercially.’ This is helpful when looking for graphics on the web to use in your own work.

Advanced Image Search Options in Google ‘Images’ Results

http://www.google.com/advanced_image_search

As in the 'All' searches, you can tell *Google* how to look for your search terms in the ‘Find images with...’ fields. These are the same fields as described above: ‘all the words,’ ‘this exact word or phrase,’ ‘any of these words,’ and ‘none of these words.’ The Advanced Image Search also has fields for ‘Region,’ ‘Site or domain,’ ‘SafeSearch,’ ‘File type,’ and ‘Usage rights’ that are exactly as described above in the Advanced Search fields. Below are special limiting fields that only appear in the Advanced Image Search. One can also find these refining options under ‘Tools’ on an image search results page.

Image size

From a dropdown menu you can choose from a variety of general size descriptions, such as ‘icon,’ to specific file sizes, such as ‘Larger than 20 MP.’

Aspect ratio

You can specify the shape of images you are looking for by selecting from: ‘any aspect ratio,’ ‘Tall,’ ‘Square,’ ‘Wide,’ or ‘Panoramic.’

Colors in image

A powerful tool when trying to find a specific image, you can limit by ‘any color,’ ‘full color,’ ‘black & white,’ ‘transparent,’ and ‘this color’ which you can choose from a color palette. This limiter is useful if you are looking for historic photos in black and white of a particular location, such as black and white images of Atlanta.

Type of image

You can limit your images to some specific popular types by selecting ‘any type,’ ‘Face,’ ‘Photo,’ ‘Clip art,’ ‘Line drawing,’ or ‘Animated.’

Utilizing Operators, Punctuation, & Symbols in Google Search

Using Search Operators to Narrow Results

Search operators are terms that can be added to basic searches to help narrow results. Many of these search operators perform the same limiting aspects as many of the options on the Advanced Search page. You do not have to memorize all of these, since you can get the same results by using the Advanced Search page. However, if you find that you want to use one of these limiters frequently, knowing the specific search operator lets you apply it when doing an initial basic *Google* search. You can also combine these search operators and punctuation to further narrow results. For

example, if you want to search everything except a specific domain or web address, you can combine the site: operator with the minus/dash sign -site:uga.edu to get results from any site besides uga.edu. Note: When you search using operators, do not add a space between the operator and your search terms. For example a search for site:nytimes.com will work, but site: nytimes.com will not.

site: **Get results from certain sites or domains**
Find all mentions of "Scalia" on the C-SPAN website, or any .gov websites.
Examples: Scalia site:cspan.org and Scalia site:.gov

link: **Find pages that link to a certain page**
For example, to see which websites link to the University of Georgia Law Library homepage, you just input the URL for the Law Library and then you can see a list of webpages that link to that website.
Example: link:law.uga.edu/library

related: **Find sites that are similar to a URL you already know**
If you search for related sites to SCOTUSblog, you will find other U.S. Supreme Court or legal blog sites you may be interested in.
Example: related:scotusblog.com

info: **Get information about a URL**
Find information including the cached version of the page, similar pages, and pages that link to the site.
Example: info:llrx.com

cache: **Previous snapshot of a website**
See what a page looks like the last time Google crawled the site.
Example: cache:law.uga.edu

Proximity Operator

The Proximity Operator can be very helpful with locating results that are on point. You can search *Google* based on the proximity words in the results using the AROUND(N) operator. The N is the maximum number of words between the two search terms. For example, the search Erik AROUND(2) Moore would turn up results

for “Erik Moore”, “Moore, Erik”, and “Erik A. Moore”.

OR Operator

The OR Operator is useful if you want to search for pages that may have just one of several words listed in your search. Since *Google* automatically looks for all words in a search, to get it to search for one word or another, use the term OR (capitalized) between the words that you want either of in your search results. For example: winter olympics location 2018 OR 2022

Punctuation & Symbols that Google Search Recognizes

Even though the symbols below are supported in *Google*, including them in your search does not always improve your results. However, sometimes they can be a useful tool to use in your initial basic search. Note: When you search using symbols, do not add a space between the symbol and your search terms. For example, a search for -dogs will work, but - dogs will not.

+ Plus sign

Search for Google+ pages or blood types

Examples: +Chrome

Example: AB+

Note: The plus sign used to work as a way to ensure that a term **MUST** be in your search results. However, Google did away with this search feature when Google+ was introduced because they wanted to use the plus sign for searching associated with that service. Many searchers still lament the loss of the plus sign to highlight important terms in their searches.

@ “at” sign

Find social tags, such as those used in Twitter.

Example: @UGASchoolofLaw

\$ Dollar sign

Find prices

Example: printer \$500

Pound sign

Find popular hashtags for trending topics

Example: #UGA

- Minus/dash sign

When you use a dash before a word or site, it excludes results that include that word or site. This is useful for words with multiple meanings, like Jaguar the car brand and jaguar the animal.

Examples: jaguar speed -car and pandas -site:wikipedia.org

When the dash is connecting multiple words, *Google* will know the words are strongly connected.

Example: seventeen-year cicada

_ Underscore

Find a search term that is sometimes connected, but sometimes are two separate words.

Example: loose_leaf finds looseleaf, loose-leaf, loose leaf

Example: quick_sort finds quicksort and quick_sort

" Double Quotes

When you put a word or phrase in quotes, the results will only include pages with the same words in the same order as what is inside the quotes.

Example: "four score and seven"

Note: Only use this if you are looking for an exact word or phrase, otherwise you will exclude many helpful results by mistake.

*** Asterisk**

You can use one or more asterisks (*) in a natural language search query phrase as wild cards for search terms. Use with quotation marks to find variations of that exact phrase or to remember words in the middle of a phrase. Google will return results that contain the phrase you used with the asterisk wild card filled in.

Example: "a * saved is a * earned"

Example: Georgia was founded by * finds “Georgia was founded by colonist James Oglethorpe” and “HomeSafe Georgia was established by the Georgia Department of”

.. Double Period

Separate numbers by two periods without spaces (..) to see results that contain

numbers in a given range of things like dates, prices, and measurements.
Example: iphone x \$1000..\$2000

Utilizing Filters in Your Search Results

After you have done a basic *Google* search, you can filter results by using the options at the top of the results page. You can use the predefined filters such as 'News' or 'Videos.' You can also find additional specific filters by clicking on 'More.' And for some of the type of results filters ('Images,' 'Videos,' and 'Books') you can also utilize the Advance Search features under 'Settings,' just like you can with the default 'All' results.

Note: Filtering your search results doesn't change any of your search settings. To change your ongoing 'Search Settings' like SafeSearch, search history, results per page, languages, and location, click on 'Settings' and select 'Search Settings' or go to the url: <http://google.com/preferences>.

Using Type of Results to Filter Your Search

At the top of a search results page, there are several options to filters your search results by type of content. Your results always default to 'All' results, but you can currently choose from the following type of results filters: 'News,' 'Images,' 'Videos,' 'Shopping,' 'Maps,' 'Books,' 'Flights,' 'Finance,' and 'Personal.' For example, if you are in the market to buy a new phone, search for iphone x \$1000..\$2000 then when you get your initial results click on 'Shopping.' It will take you to a new results screen that focuses on retail offers and additional ways to filter the results, such as "iphone cases."

To get back to the unfiltered results, just click on 'All' at the top of the search results page.

Using Tools to Further Filter Your Search

Once you have decided which type of results you want, either leaving the results in 'All' or using a type like 'Images,' you can refine your results even further using 'Tools.' Click on 'Tools' to see more filters you can apply to your search. Some filtering options are not available in all languages or only display if you are signed in to your *Google* account. Search tools will be different based on the type of results you are viewing, such as 'All' or 'Images.'

Search tools you can use on 'All' results:

Published date

Limit results by when they were published on the Web.

Verbatim

Search for exact words or phrases.

Search Tools you can use on 'Images' results:

Size

Pick between large, medium, or icon, or set the exact dimensions.

Color

Find images of a certain color, black and white, or transparent.

Type

Only see images that are faces, photos, clip art, line drawings, or animated GIFs.

Time

Find a photo that was recently published, or published on a certain date.

Usage rights

See photos that you can reuse or modify.

Search Tools you can use on ‘Videos’ results:

Duration

Pick between short, medium, or long lengths of time for the videos.

Date

Find videos based on when they were loaded.

Quality

Find high quality videos.

Closed captioned

Locate videos that contain closed captioning.

Source

Limit results to videos coming from a specific source in your results.

Searching Specific Google Databases

Google produces many interesting special topic databases they refer to as ‘Specialized Search.’ Rather than just searching basic *Google*, try utilizing some of these specialized search databases to locate information. From the *Google* homepage you can find these under the apps grid icon at the top of the page or you can use their URLs to go directly to their specific search screens.

Google Specialized Search Databases

Google Scholar

<http://scholar.google.com/>

Google Scholar provides access to scholarly articles, papers, books, theses, and

abstracts through a full-text search of research materials from academic presses, university and scholarly organizations, preprint repositories, and professional societies. Results are ranked for not only appearance of your search terms, but more importantly for the scholarliness of the publication by analysis of its source, author, and citation in scholarly literature. *Google Scholar* allows you to search a wide breadth of subject areas and materials in a single search. The results consist mainly of citations and abstracts, but include ways of locating articles or papers at local libraries and provide links to where the content can be purchased on the web. *Google Scholar* offers an Advanced Scholar Search option that is very useful for refining your results, such as limiting them to specific subject areas.

In addition to scholarly articles and patent information, *Google Scholar* offers an extensive database of state and federal cases. *Google Scholar* is particularly useful for legal research when looking for a known case or specific citation. First select the 'Case law' button, then refine one's search by clicking on the 'Select courts' link, then input search terms or enter a citation into the search box. Advanced Search options can be accessed by clicking on the downward-pointing arrow in the search box, which lets one search for a phrase, exclude certain terms, or limit by date. One can also narrow search results using the facets on the left side of the screen. For example, if one clicks on the 'Select courts' button in the facet list, one can limit the results to specific jurisdictions. Under 'Settings' at the top of the main search page, you can change *Google Scholar* so that it always defaults to searching 'Case law' by selecting 'Search case law' option and hitting save.

Google Books

<http://books.google.com/>

Google Books provides a searchable database of information about books and their contents from a variety of sources. Some source information comes from authors and publishers looking to promote their publications as part of *Google's* Partner Program. Large academic libraries are also a major source of book information and contents, with scanning projects now being conducted at nearly 30 libraries from around the world, making up *Google's* Library Project. If the book is in the public domain, you can page through the entire book, print it, or download it. If the book you identify is under copyright, and the publisher or author is not part of *Google's* Partner Program, then only brief information about the book appears. If the copyrighted book was scanned as part of the Library Project, 'snippets' of sentences showing your search terms in context will appear. Under 'Settings,' you can access the Advanced Book Search options which allow you to narrow where your search terms are retrieved from, such as title, publisher, or publication date, and to limit results to books that have full view available. If you find a book you like, click on the "Get Print Book" links to see where you can buy or borrow the print book. When available, you will see a "Buy ebook" link which takes you to the *Google Play Store*.

Google Translate

<http://translate.google.com/>

Like many translation websites, *Google Translate* allows you to enter text or a webpage URL needing translation. There is also a 'translate a document' option which

allows you to upload a file to be translated. It offers translation to or from 90 languages including Arabic, Hindi, Chinese, Korean, most European languages, and now also a few major African languages. *Google Translate* is built into the Chrome browser and will prompt you automatically to translate non-English webpages. The *Google Translate* app once downloaded on your phone will work in any other apps you have installed.

Google Patents

<http://www.google.com/patents>

Google Patents is made up of patents issued by the United States Patent and Trademark Office between the 1790's and into 2017. Since it does not cover current applications or international patents, it is primarily useful for historical research, although patents having been filed only a few months ago, sometimes also appear in the results. If you have a specific patent number, you can input that into the search box and it will come right up in the search results. You can see not only the *Google Patents* generated results but also access the .pdf files of the patents as issued. If you know someone's name and location, for example a search for *George L. Moore Iowa* returns several matching results, including the patent needed, which turned out to have been issued in 1916. As with other *Google* searches, once you have done a basic search in *Google Patents*, you can utilize Advanced Search fields by going to 'Advanced search' under 'Settings.' You can narrow your results considerably by using the following fields: Patent Number, Title, Inventor, Original Signee, Current U.S. Classification, International Classification, Cooperative Classification, Patent type/status, Date Ranges, and the ability to restrict by either filing date or issue date.

Google Finance

<http://www.google.com/finance>

Google Finance offers a financial market summary, news feeds, and the ability to track domestic trends across specific sectors of the economy. If you set up your own portfolio in *Google Finance*, then you can utilize additional portfolio tools which allow you to track specific stocks and businesses.

Google News

<http://news.google.com/>

Google News lets you retrieve news stories from a variety of news outlets on the Internet. Offering broad subject areas as well as trending topics, you can also personalize your *Google News* results to focus more on certain news subjects such as “World,” “Business,” or “Sports.” There is also a way to personalize the frequency at which particular news sources appear in your results, for example you could decrease *ESPN.com* or increase *BBC News* in your news feed.

Switching Between Google Search Databases & Other Products

To access other *Google* products easily, like *Gmail*, *Google Drive*, or *Calendar*, you can use the app grid that is at the top of the screen when you are in most *Google* search products. You can also use the app grid to access many of the specialized search resources described above.

Switch between products

To switch between *Google* products, click the app grid icon  and select the one you would like to use. If you do not see what you want in the menu, click ‘More’ or ‘Even more from Google’ at the bottom of the dropdown menu to see additional *Google* products and specialized search databases. You can use these icons to switch from your *Gmail* account to *Google Patents* and then back to your *Gmail*.

Customize your menu

You can customize the app grid menu to show your favorite products at the top. To put the products in the order in which you'd like them to appear, simply drag and drop them within the menu. Under ‘Even more from Google’ you can find additional services. If you would like to add one of these products you don't see in your grid menu, go to the product you would like to add and then open the App launcher, and you'll see a prompt to add it to the app grid. If you do not see the app launcher on the product page, you cannot add that product to the app grid, such as with *Google Scholar*.

Other Databases for Searching

Much of the content on the Internet cannot be searched by *Google*. Content is behind a paywall on a subscription site or is only available once a search has been done in a database. Many of these sites specialize in legal information. While far from comprehensive, this section features a few of these databases and portals that may be useful for your legal research.

Casetext

<http://casetext.com/>

Casetext, founded and managed by practicing litigators, expands the free law mission to make law not only publicly available, but also understandable. There are over a million judicial opinions, statutes, and regulations with annotations of practicing attorneys, professors, and other experts alongside the text. You can access these after creating a free account. *Casetext* has recently launched a fee-based brief checker service called *CARA*. You can upload a brief into *CARA*'s secure system and it will recommend a list of cases that are relevant to your brief but not yet cited in it. The brief finder feature locates briefs that address the same issues as the brief you have uploaded into *CARA*. The heat map and key passages features lead you to the most cited passages in cases and the negative treatment flags will warn you about cases you might not want to rely on.

Court Listener

<http://www.courtlistener.com/>

Court Listener provides a free and timely way to get alerts of cases at Federal and state courts. After creating an account, one can create alerts based on search queries. Even without creating an account one can search the site for court opinions using their impressive search filters, advanced search options, and relevancy ranking. What sets *Court Listener* apart from other free law sites is its freely-available citator showing subsequent opinions that have been cited to the opinion one is viewing. The site strives for as close to real-time coverage as possible, with opinions appearing for the courts they

cover within 30 minutes of them being posted on the court's website. There are also uploaded each day non-precedential opinions from all of the Federal Circuit Courts except for the D.C. Circuit. They boast that their coverage of the Supreme Court and the third series of the *Federal Reporter* is the best available on the open Internet. There are over 4 million opinions from over 400 court jurisdictions are now represented in *Court Listener*. They have used data from *Public.Resource.org*, *LawBox, LLC* as well as from court websites to build this large back-file of opinions. One can access a detailed list of the court coverage at the URL <<https://www.courtlistener.com/api/jurisdictions/>>. The site is very forthcoming about privacy issues, clearly stating what site use they track and why, with their stated goal to making the site as secure and private as possible. *Court Listener* started in 2010 and is now a core project of the Free Law Project, a California Non-Profit corporation.

Federal Courts Web Archive

[http:// www.loc.gov/collections/federal-courts-web-archive/](http://www.loc.gov/collections/federal-courts-web-archive/)

Launched in September 2017 by the Library of Congress and the Law Library of Congress, *Federal Courts Web Archive* provides resources for conducting retrospective research into the work of the federal judiciary. It covers the U.S. Supreme Court, U.S. Court of Appeals, U.S. District Courts, and U.S. Bankruptcy Courts, as well as the U.S. Court of Federal Claims, U.S. Court of International Trade, U.S. Tax Court, U.S. Court of Appeals for Veterans Claims, and U.S. Court of Appeals for the Armed Forces. The materials included from these websites include slip opinions, transcripts, dockets, court rules, calendars, announcements, judicial biographies, statistics, educational materials,

and reference materials.

Govinfo

<http://govinfo.gov/>

A service of the Government Publishing Office (GPO) launched in February 2016, *Govinfo* provides free online access to official publications from all three branches of the Federal Government. *Govinfo* features an advanced search engine to allow one to refine and narrow searches for quick access to the documents and publications. It also includes a content management system and a digital preservation repository. You can also browse 'What's Available' or view an alphabetical list of collections including 'Public and Private Laws,' 'Compilation of Presidential Documents,' and most notably 'United States Court Opinions.' Resources available on *Govinfo* are authentic, digitally signed PDF documents, which makes it an exceptional source for legal information. *Govinfo* is a redesigned, mobile-friendly resource that will completely replace *FDsys* in the near future.

Internet Archive

<http://www.archive.org/>

Internet Archive is a non-profit library that includes texts, video, music, images, software, and most importantly archived web pages. Its purposes include "offering permanent access for researchers, historians, scholars, people with disabilities, and the general public to historical collections that exist in digital format." The *Internet Archive* is working to prevent the Internet and other "born-digital" materials from disappearing

into the past leaving a digital dark age for future researchers. It is not uncommon to have an old URL that now goes nowhere or a need to see what information was displayed on a webpage in a previous version. The *Internet Archive* collection of webpage snapshots, sometimes going back to the 1990's, can help one identify and document key information that is no longer available on current webpages.

Listen Notes

[http:// www.listennotes.com/](http://www.listennotes.com/)

Locating podcasts relies heavily on word-of-mouth or popular charts such as in iTunes. Which means you can overlook many good quality, relevant podcasts on specific niche topics. *Listen Notes* aims to be Google for podcasts. It allows you to search for people, places, and subjects within podcast episodes. Their database contains nearly 25 million episodes from over 416,000 podcasts. Your search results contain not only descriptions of the episodes, but also options to stream, download, or subscribe to the podcasts. You can sort by date or relevance as well as limiting results to single episodes or to podcast titles.

Municode

<http://www.municode.com/>

Municode provides access to over 4,100 local codes from all around the country. The coverage of Georgia county and municipal codes is particularly strong. You can browse and search one code at a time for free under 'Library' from the link in the navigation bar on the homepage. The codes are now also available in a mobile platform

version in addition to the desktop browser version. The codes are only as current as the most recent update from the local government; however, the last updated date is clearly marked in the banner information for each code. *Municode* is the oldest and largest codifier in the country and has demonstrated a strong commitment to making these ordinances freely available on the Internet.

Public Library of Law - PLoL

<http://www.plol.org/>

Created by *Fastcase*, the *Public Library of Law – PLoL* is a resource for searching freely available law on the Internet. It provides a searchable interface to a large collection of primary law at both the state and Federal levels. *PLoL* features cases from the U.S. Supreme Court and Courts of Appeals, cases from all 50 states back to 1997, as well as codes from all 50 states, regulations, court rules, and constitutions. There are also helpful video tutorials and guides to learn more about searching for cases and statutes on the site. *PLoL* requires registration and login before materials can be accessed, however they note that they never give registration information to third-parties. It also offers links to information on *Fastcase* that can be accessed through the State Bar of Georgia agreement with *Fastcase*.

Regulations.gov

<http://www.regulations.gov/>

Regulations.gov is a one-stop source to find and view Federal regulations and related materials. Through *Regulations.gov*, you may also comment on proposed

regulations open for comment and view closed for comment regulations. The types of documents that can be found on this site include Proposed Rules, Rules, as well as Notices from the Federal Register. Public Submissions (e.g., comments, citizen petitions, early submissions) and Supporting Materials often associated with regulatory actions can also be found on *Regulations.gov*. The website offers three tabs in the upper right to help you explore regulatory information. The default tab is the "Search" tab, which provides a keyword search box to look for rules, comments, adjudications, and supporting documents. The returned search results offer a variety of facets to simplify narrowing one's results. There is also a "Browse" tab which groups regulations into ten industry-related categories, which allows one to locate recent actions of interest by subject. Finally, there is a "Learn" tab which gives a step-by-step explanation of the rule-making process and helps to fulfill the website's mission of making it easier for the public to participate directly in the regulatory process. *Regulations.gov* is managed by the eRulemaking Program with assistance from partner agencies.

USPTO.gov

<http://www.uspto.gov/>

USPTO.gov, the website for the United States Patent and Trademark Office, provides a wealth of practical information and resources for filing for patents and trademarks, as well as offering news, public notices, and press releases from the agency. The four primary sections of the website, 'Patents,' 'Trademarks,' 'IP Policy,' and 'Learning and Resources' can be accessed from the large dropdown menu at the top of every webpage. Under 'Patents' the variety of patent related databases one can search

are laid out and described. The patent search allows one to search either issued patents or published patent applications. Under ‘Trademarks’ one can also access trademark application databases and search the Trademark Electronic Search System (TESS), which contains the USPTO’s pending and registered trademarks. There are step-by-step directions under “Patents Process” and “Trademarks Process” to help individuals and legal professionals with the process of obtaining a patent or a trademark. Under ‘IP Policy’ there is information that could be of interest to a practicing attorney such as trade secret, enforcement, legislative affairs, and the U.S. IP Attaché program. The subsection “Attorneys, Agents and Paralegals” under the ‘Learning and Resources’ section highlights the applications, contacts, services, and publications most frequently used by attorneys.

Algorithms and Search Results

Because search engines are designed by people, the algorithms used are susceptible to differences and even biases. Human-made decisions effect the results retrieved. Researchers know very little about how and why search algorithms are constructed. A recent study by University of Colorado Law Library Director Susan Nevelow Mart, “The Algorithm as a Human Artifact: Implications for Legal (Re)Search,” compared search queries across six commonly used legal research databases: Westlaw, Lexis Advance, Fastcase, Google Scholar, Casetext, and Ravel. Analyzing for uniqueness and relevance, Mart’s study found that there was limited overlap in cases listed in the top 10 results returned in each database. On average 40% of the results were unique to

one of the six legal research databases. Westlaw and Lexis Advance both offered a higher relevance of results than the other four databases, but all six still had an average of 35-60% of returned top 10 results determined to be irrelevant to the search query. The study concludes that currently there is no perfect tool for legal research. There is still a need for redundancy both in searching and in legal research databases available to the researcher.

Five Search Tips to Remember

This paper includes many operators, limiters, filters, and special databases you can search. It can be difficult to remember it all. Below are five tips to utilize not only when you are searching *Google*, but also when you are searching any free or fee-based information resource.

Tip 1. Revise Your Search Sooner, Rather Than Later

When you find that the first few hits of your search are irrelevant, or are not what you are looking for – immediately revise your search. It is tempting to keep paging through screens of results, but since search engine algorithms put the most relevant results first, if you do not have helpful results in the first 10 results, you should try your search again. It will take much less time to change your search, than it will to keep paging through irrelevant results on the outside chance that you will find something on target down several pages. Adding an additional word to the search or changing a word

to a synonym can often make a huge difference in the relevance of your returned results list.

Tip 2. Utilize the Filters and Advanced Search Options of a Search Engine

The secret that all smart searchers know is that using filters and “advanced search” options make searching easier and your results more relevant. Many search engines offer similar advanced search options, although you can usually only access the options after you have run a basic search. It is simple to learn these advanced search options and to begin applying them to your searching right away. Using filters and advanced search options is the single most important thing you can do to improve your search results.

Tip 3. Read the Search Engine Tips Pages

All search engines have some sort of “tips” or help pages. Sometimes they have even formatted them as a printable guide. Taking a few minutes to review search modifiers and syntax, will improve your search strategy not only for that search, but will improve your searching thereafter. *Google’s* support page <<http://support.google.com>> when selecting the “search” icon takes you to an easy to navigate help section. There is also an About section in *Google Search* <<http://www.google.com/search/about>> which highlights information about newer Google product features.

Tip 4. Search Another Search Engine or Database

Be knowledgeable about other databases and portals to use for your specific

research needs. Many are more on point to your topic than a basic *Google* search. Algorithms vary from one database to another and may return more relevant results depending on your search. Make use of more than one search resource to look for variation in your results and improve your research.

Tip 5. Make Use of Free Add-On Tools Available for a Browser

Utilize the tools search engines freely provide, such as browser toolbars and emailed web update alert notices, to increase the integration of searching into your desktop environment. If searching and reviewing results is convenient to use, then you will be more likely to conduct searches whenever you have a question. Browser toolbars save you the step of going to the search engine web site. They also have handy features like the ability to highlight your search terms in your results and shortcut buttons to search other favorite sites like *Amazon* or *Wikipedia*.

Google's own web browser *Chrome* integrates many *Google* features into the browser itself. You can type directly into the url/search bar to get *Google* results. You can input commands into the url/search bar such as “10 min timer” to bring up a countdown or “=23x10” to get answers to calculations. In *Chrome* you can right click on photos you find on webpages and select “Search Google for image” to execute an image search. On any webpage you can also right click to select “Inspect” which reveals information on the webpage’s fonts, colors, images, sizing, etc. The right click feature will bring up the “Translate to English” option in *Chrome* as well.

Another useful tool that search engines offer is the ability to set up regular searches that you want to run and have the results sent to you in the form of an email

alert. Using alerts is an excellent way to keep up on a developing news story or to monitor information about a company or person.

Conclusion

The Internet provides many cost effective, content rich resources that can provide you with the legal information you need. Often a basic search in *Google* will bring up the exact information you are looking for. When a basic *Google* search fails to return relevant results or you know you are seeking very specific information, make use of the filters and Advanced Search options in *Google*. You may instead want to use a specialized search database or portal to retrieve results harder to get to in a basic *Google* search. Taking the initiative to search beyond basic *Google* will provide you with the confidence that you are locating the information you need and will make your searching of the Internet more successful.

Sources for Further Learning

The sources listed below provide expanded information on searching *Google* and will be useful for further learning or reference.

Books & Articles

Mart, Susan Nevelow. "The Algorithm as Human Artifact: Implications for Legal

[Re]Search” ***Law Library Journal*** Vol. 109, no.3 (2017) pp. 387-422.

Compares the search results received running the same queries in *Westlaw*, *Lexis Advance*, *Fastcase*, *Google Scholar*, *Ravel*, and *Casetext*. The variability of the algorithms developed and used by these products is explored. The article focuses on what the implications of these differences are for legal research.

Levitt, Carole A. and Mark E. Rosch. ***The Cybersleuth's Guide to the Internet: Conducting Effective Investigative and Background Research on the Web***. (14th ed.) Culver City, CA. : Internet for Lawyers, 2017.

The Cybersleuth's Guide to the Internet is a guide to free and low cost resources for conducting investigative and legal research on the Internet and includes numerous examples based on real world research scenarios that legal professionals will find useful. For the beginning searcher, the book covers many overlooked features of Web browsers, the "mechanics" of navigating the Internet, and basic research strategies and tools. For "power searchers," *The Cybersleuth's Guide to the Internet* covers more advanced search strategies, and uncovers tip and tricks for getting the most out of many of the sites.

Levitt, Carole A. and Judy K. Davis. ***Internet Legal Research on a Budget: Free and Low-Cost Resources for Lawyers***. Chicago: American Bar Association Law Practice Division, 2014.

Internet Legal Research on a Budget: Free and Low-Cost Resources for Lawyers, provides you with tips for finding the best free or low-cost resources online and how to use them for your legal research needs. The authors share the top websites, apps, blogs, Twitter feeds, and crowdsourced resources that will save you time, money,

and frustration during the research process.

Google Search Education Online

<http://www.powersearchingwithgoogle.com/course/aps/skills>

Improve your *Google* search skills with the “Power Searching” and “Advanced Power Searching” online courses offered by *Google*.

- Learn tips and tricks to become a fast and effective fact-finder with “Power Searching.”
- Deepen your understanding of solving complex research problems using advanced *Google* search techniques with “Advanced Power Searching.”
- Offers both video and text-based learning.

Google Quick Reference Guide

<http://www.powersearchingwithgoogle.com/assets/misc/AdvancedPowerSearchingQuickReference.pdf>

The *Google Quick Reference Guide* is in .pdf format and includes three tip sheets: “Power Searching with Google Quick Reference,” “More Ways to Search ...,” and “Advanced Power Searching Skills Quick Reference.” Easy to print out and keep near your computer for reference.

Internet for Lawyers

<http://www.netforlawyers.com/>

Since 1999, *Internet for Lawyers* has provided law firms, corporations, and local

and state Bar Associations around the country with professional and entertaining turn-key CLE programs. The company focuses on delivering information about free investigative and background research resources available on the Internet. The *Internet for Lawyers News Items* blog < <http://www.netforlawyers.com/newsitems>> keeps readers up to date with the latest free and low-cost investigative and background research resources freely available on the Internet. The blog also covers search engine search tips with a focus on Google and its features, functions and productivity tools. *Internet for Lawyers* is run by co-founders and authors Carole A. Levitt and Mark E. Rosch.

LawSites blog

[http:// www.lawsitesblog.com /](http://www.lawsitesblog.com/)

Started in 2002, *LawSites* tracks new and evolving products for the legal profession. Written by Robert Ambrogi, a lawyer and media consultant, the blog focuses on the Internet, social media, and legal technology. New web-based resources such as databases and portals are regularly featured, as well as reviews of new legal software products and apps.

LLRX

[http:// llrx.com /](http://llrx.com/)

LLRX is a free online journal focusing on a wide range of legal and web research topics, technology-related issues, applications, resources and tools. *LLRX* is a good source for reviews software and online legal applications and database services. You can

keep up-to-date with *LLRX* by signing up for their monthly e-mail alert sharing the topics and authors featured in each new online issue.