

SPJ/Google Digital Tools Training Resources

Contact Mike: mikereilley1@gmail.com | [@journtoolbox](#)

<http://bit.ly/spjresources>

- **Journalist's Toolbox:** <https://www.journaliststoolbox.org/> | [@journtoolbox](#)
- **Toolbox YouTube (subscribe!):**
<https://www.youtube.com/channel/UC8CCI01DmsE65wh-qPqjSLQ/videos>
- **Toolbox newsletter (subscribe!):**
<https://journaliststoolbox.substack.com/>
- **USA Today Training Network:**
<https://training.usatodaynetwork.com/>
- **Business reporting tools exercises:**
<http://bit.ly/googlefinancetools>
- **Google News Initiative:**
<https://newsinitiative.withgoogle.com/training/>
- **Google SEO guide:** <https://backlinko.com/google-seo-guide>

More data scraping in Mike and Samantha Sunne's book, *Data + Journalism*: <http://bit.ly/buydatabook>



Google Tools and Other Basics

****Fun hack launching a new Google sheet:**

Sheets.new

Docs.new

Thsrs: The Shorter Thesaurus: <https://www.ironicsans.com/thrsr/>

Lose the Very: <https://www.losethevery.com/#>

Micro-Search Sites

1.Fact-Check Explorer:

<https://toolbox.google.com/factcheck/explorer>

Video: [Copy editing tools \(second tool\)](#)

2.Dataset Search: <https://datasetsearch.research.google.com/>

Video: [Dataset Search](#)

3.Google Scholar: <https://scholar.google.com/>

Search academic journals and case law

Look up experts, academic journal articles and case law, etc.

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Google Earth Engine Timelapse:
<https://earthengine.google.com/timelapse/>

Video: [Google Earth Engine Timelapse Update](#)

If time: Visual Ping

<https://visualping.io/>

Track website updates. Enter a URL and it sends you an update when a website has been updated. Five free searches per month, then switches to a tiered subscription model.

If time: PDFtoExcel.com to scrape data from PDFs

<https://www.pdfexcel.com/>

If time: Toby for Chrome

<https://chrome.google.com/webstore/detail/toby-for-chrome/hddnkoipeenegfoeaoibdmnaalmgkpip?hl=en>

Group your bookmarks by topic and save into your Chrome browser. Safe as it requires you to log-in before using.

Search shortcuts:

Search within a site for a topic: site:cdc.gov SARS

Search for a file format/topic: filetype: .xlsx us mass shootings

Search for words around (near) each other:
"gdp" AROUND(20) "Ireland"

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Pinpoint: <https://journaliststudio.google.com/pinpoint/collections>

Google Earth Suite

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***-Google Earth Images are rights-free. Concerns? Look it up here:** <https://google.com/permissions>

Google Earth Pro: <https://www.google.com/earth/versions/>

Juxtapose photo slider: <https://juxtapose.knightlab.com/>

Example: NPR: JuxtaposeJS for a striking now-and-then look at a withered glacier: <https://t.co/6GcSrw1Z66>

Google Earthview Chrome Plug-In

<https://chrome.google.com/webstore/detail/earth-view-from-google-ea/bhloflhklmhfpedakmangadc dofhnnoh?hl=en>

Google Earth Examples

NBC Bay Area: Hunters Point Shipyard Contamination, Cleanup and Development

<https://www.nbcbayarea.com/investigations/San-Francisco-Hunters-Point-Contamination-Cleanup-Development-494440271.html>

Successful Farming (Meredith): [Google Earth Pro in video about how paralysis can't keep a Minnesota Farmer down](#)
Video is at end of the story. Earth Pro segments set location/transitions in the story.

Fort Myers Beach Hurricane Ian: Earth archived satellite images:
https://twitter.com/drewmacfarlane/status/1575542302180839446?s=51&t=He1_gWaGSB6La5vi7eN-nQ

Google Earth Pro: Notre Dame football Shamrock Series

Bloomington, Indiana: And our I-69 story with a couple Juxtaposes:

https://www.hoosiertimes.com/herald_times_online/news/local/i--crews-preparing-for-iu-move-in/article_ce43eee0-c4b9-5fc3-b35a-6cd251871276.htm

Desert Sun: Wildfire Prevention Video in San Diego (Google Earth)

<https://www.desertsun.com/in-depth/news/2019/08/01/san-deigo-fire-chief-oks-wildfire-hazard-development-new-homes-adara-otay-ranch-cula-vista/1664951001/>

USA Today: Google Earth and Timelapse on Amazon Rainforest Wildfires

<https://www.usatoday.com/in-depth/news/2019/08/23/amazon-rainforest-six-charts-explain-why-fires-matter/2096257001/>

The Vanishing of Candlestick Park (Instagram):

<https://www.instagram.com/reel/CidnBmxASCj/?igshid=YmMyMTA2M2Y=>

Social Video for Amazon Rainforest Wildfires

<https://twitter.com/usatgraphics/status/1165036342906097672>

Google Maps Example: Decatur III Bridges Project. Lee Enterprises:

https://herald-review.com/news/local/public_safety/watch-now-macon-county-engineers-study-options-for-local-bridges/article_46899560-207f-59eb-916a-c59bdda8263a.html

Google Earth Example, Datawrapper Example

Google Maps Example: The Pantagraph Bridges Project. Lee Enterprises:

https://www.pantagraph.com/news/local/govt-and-politics/watch-now-19-mclean-county-bridges-rank-as-poor-in-federal-database/article_2f620fc2-ac7b-5673-912f-26fb63d4fe29.html

More Datawrapper examples

BBC Africa: Anatomy of a Killing

<https://twitter.com/BBCAfrica/status/1044186344153583616>

Used Google Earth tools to geolocate/fact check location of a gruesome murder of women and children in Africa.

NY Times: [Google Earth for Barcelona terror attack graphic](#)

NY Times: [Google Earth for Las Vegas shooting graphic](#)

DNAInfo Chicago: Las Vegas shooter and Lollapalooza

<https://www.dnainfo.com/chicago/20171005/loop/chicago-hotel-las-vegas-shooter-stephen-paddock-ollapalooza-blackstone-map/>

Hookem: Big 12 Stadium Tour in Google Earth

<https://www.hookem.com/videos/sports/2021/02/14/big-12-conference-football-birds-eye-view-all-9-stadiums/4484699001/>

Columbus Dispatch: Ohio State Football Road Schedule

<https://www.youtube.com/watch?v=KO74tpmNts8>

The Red Line Project: Why Are Chicago's Lakefront Beaches Disappearing?

https://redlineproject.org/rising_lakefront.php

York Record: [Here's a Bird's-eye view of YAlAA stadiums, athletic campuses](#)

Northwestern: Isle de Jean Charles Disappearing

<https://ecocide.medill.northwestern.edu/index.php/2021/07/19/to-flee-or-to-stay-until-the-end-and-be-swallowed-by-the-sea/>

Part of ecocide project.

San Antonio Express News: [See how Texas Cities Have Changed](#)

KC Star: [Trail murders Google Earth Pro video](#)

KC Star: [Police shooting of Overland Park student](#)

Google Earth Pro tour, Broadcastify video and images to illustrate dispatch radio traffic as police respond to a student's suicide attempt.

Before/After Slider: Concrete Sprawl in Bettystown Ireland Housing

<http://kellyfincham.com/myblog/concrete-sprawl-in-bettystown-housing>

By Kelly Fincham

Google Earth Studio Example: Gay Street flyover in Knoxville

<https://www.jacklail.com/2018/12/11/a-flyover-of-gay-street/>

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University of Minnesota: Activism in Campus: Fighting for food sovereignty (second video | 25 seconds)

<https://visualstorytelling2022.hubbardschool.org/2022/04/09/team-three/>

Social Video for Amazon Rainforest Wildfires

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Reno Gazette Journal: How two skiers survived a Sierra avalanche on Jobs Peak

Story:

<https://www.rgj.com/story/life/outdoors/2019/03/22/nevada-skiers-barely-escaped-jobs-peak-accident-before-nightfall/2943310002/>

Video:

<https://www.rgj.com/videos/news/2019/03/23/how-two-skiers-survived-harrowing-avalanche-nevadas-jobs-peak/3251924002/>



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Video: [Search tips](#)

Twitter thread: [Cool search tips](#)

Some cool [Google Drive hacks](#)



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Search Google Like a Pro

You know how to Google,
but do you do it like a pro?

Here are a few simple yet very helpful search operators to help you
Search Google... like a Pro

“Quotation Marks” **“I love you Mom”**

Using quotation marks in your search terms lets you search exactly for that word. It means, all your results will have your search terms in them.

- Dashes **dolphins -football**

If you want to exclude a term from your search include a hyphen before that word.

~ Tilde **music ~classes**

Use tilde when you want also its synonyms to appear in the result. The above query will search for music classes, lessons, coaching etc.

site: **site:ndtv.com**

Use this operator to search within a specific website only.

| verticle bar **blouse | shirt | chemise**

This query will search websites that have any one/two/all of the terms

.. Two Periods **movies 1950..1970**

Include two periods when you want to search within two number ranges

Fact-Checking

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Google Image Search: <https://images.google.com/>

Also: Follow [@searchthisimage](#) bot on Twitter. Then when you see a photo in a tweet you want searched, just reply under the tweet with [@searchthisimage](#) and wait for a bit. The bot should reply on the tweet with a link to the search results.

TinEye: <https://tineye.com/>

WatchFramebyFrame.com

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

Great for fact-checking videos. Paste URL into player and hit the arrow keys to look at each shot frame by frame. Watch for shadows out of place, etc. (You can watch frame by frame in YouTube by using

the comma and period keys after pausing the video. Comma moves backward and period forward.) Test both out with this famous fake (watch shadows of bird/kid):

<https://www.youtube.com/watch?v=DPXAK2IJmEQ>

How to tell it's fake:

<https://www.youtube.com/watch?v=WVr43I16B3Q>

YouTube Dataviewer

<https://citizenevidence.amnestyusa.org/>

From Amnesty International, plug YouTube video URL in and see where the video has been published.

[Verification Handbook](#)

Case studies and examples of how to verify photos, video and other news.

InVid Video News Verification

<https://invid.weblyzard.com/>

Also available as a Google Chrome plug-in.

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More photo forensics

FotoForensics: <https://fotoforensics.com/>

Breaks down meta data and layers on a site. Run the tutorial linked off the bottom of the page to see how it works.

Forensically: <https://29a.ch/photo-forensics/#forensic-magnifier>

Similar to Foto Forensics, it breaks down meta-data and other parts of photos for fact-checking.

IPVM: <https://calculator.ipvm.com/>

Image forensics tool. Use to fact-check images by confirming locations.

Additional fact-checking exercises:

<https://drive.google.com/drive/folders/1JLvCShrzHFEAub2oNAip1ftywoO-2Q5n?usp=sharing>

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[oO-2Q5n?usp=sharing](#)



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IF TIME:

TinyWow: <https://tinywow.com/>

PDFtoExcel.com: <https://www.pdfstoexcel.com/>

Fact-checking

Journalist's Toolbox: <https://www.journaliststoolbox.org/>

Toolbox Twitter: <https://twitter.com/journtoolbox>

Fact-Check Explorer: <https://toolbox.google.com/factcheck/explorer>

Video: [Copy editing tools \(second tool\)](#)

Google Image Search: <https://images.google.com/>

TinEye: <https://tineye.com/>

WatchFramebyFrame.com

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

Great for fact-checking videos. Paste URL into player and hit the arrow keys to look at each shot frame by frame. Watch for shadows out of place, etc. (You can watch frame by frame in YouTube by using the comma and period keys after pausing the video. Comma moves backward and period forward.) Test both out with this famous fake (watch shadows of bird/kid):

<https://www.youtube.com/watch?v=WcA9w3CgEjY>

How to tell it's fake: <https://www.youtube.com/watch?v=WVr43I16B3Q>

YouTube Dataviewer

<https://citizenevidence.amnestyusa.org/>

From Amnesty International, plug YouTube video URL in and see where the video has been published.

[Verification Handbook](#)

Case studies and examples of how to verify photos, video and other news.

InVid Video News Verification

<https://invid.weblyzard.com/>

Also available as a Google Chrome plug-in.

Confirm Locations/Crowd Sizes

MapChecking.com: <https://www.mapchecking.com/>

Estimate crowd sizes | **Video:** [how to use it](#)

Google Earth: <https://earth.google.com/>

Google Earth Timelapse: <https://earthengine.google.com/timelapse/>

Google Maps/360 Streetview: <https://maps.google.com/>

Video: <https://www.youtube.com/watch?v=iDVvF9g2RZg>

To open new documents: Type docs.new or sheets.new into our browser field. Just be logged into your Google Drive. Works in any browser.



Part II: Data Visualization Tools

Google Dataset Search: <https://datasetsearch.research.google.com/>

Video: [Dataset Search](#)

Google Public Data Explorer:

<https://www.google.com/publicdata/directory>

Video: [Census \(first tool\)](#)

Flourish (set up free account): <https://flourish.studio/>

Video: [Using Google Flourish](#)

Flourish exercises: <http://bit.ly/googleflourish>

If time: Google Trends: <https://trends.google.com/trends/>

- Track what people are searching for in Google, as well as Google shopping

Video: [Google Trends](#)

Google Trends e-newsletter: <http://goo.gle/trendsemail>

Tabula (Download for scraping .PDFs):

Tabula: <https://tabula.technology/> and

PDFtoExcel: <https://www.pdfexcel.com/>



Part I: Google Basics

Journalist's Toolbox: <https://www.journaliststoolbox.org/>

Toolbox Twitter: <https://twitter.com/journtoolbox>

****Fun hack launching a new Google sheet: Sheets.new | Docs.new**

Dataset Search: <https://datasetsearch.research.google.com/>

Video: [Dataset Search](#)

MapChecking.com: <https://www.mapchecking.com/>

Estimate crowd sizes | **Video:** [how to use it](#)

Public Data Explorer: <https://wwwGooglePublicDataExplorer.google.com/publicdata/directory>

Video: [Census \(first tool\)](#)

Search shortcuts:

Search within a site for a topic: site:cdc.gov SARS

Site:chicagotribune.com Chicago Bears

Search for a file format/topic: filetype: .csv us mass shootings

Video: [Search tips](#)

Google Scholar: <https://scholar.google.com/>
Search academic journals and case law

Look up experts, academic journal articles and case law, etc.

Google Trends: <https://trends.google.com/trends/>

- Track what people are searching for in Google, as well as Google shopping

Video: [Google Trends](#)

Google Trends e-newsletter: <http://goo.gle/trendsemail>

Fact-Check Explorer: <https://toolbox.google.com/factcheck/explorer>

Video: [Copy editing tools \(second tool\)](#)

IF TIME:

TinyWow: <https://tinywow.com/>

PDFtoExcel.com: <https://www.pdfexcel.com/>

Part II: Data Scraping and Data Visualization Tools

Data scraping exercise: <http://bit.ly/spjdatascape>

Video: [Data scraping 101](#)

* -- **Google Sheets:** Open in Google Drive or type sheets.new in browser field or docs.new in browser window for a document.

If time: Tabula (Download for scraping .PDFs):

<https://tabula.technology/> and PDFtoExcel:

<https://www.pdfexcel.com/>

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