

Verifying User Generated Content

In the newsroom and classroom

Part 1 - Web and Social

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Part 1 Web and Social

This booklet is a quick guide to using online and social media tools to check information, confirm the validity of a company or website, or to track down people. It is of particular use to journalists who need to verify information when a story breaks or that users have passed to them. We have deliberately kept explanations short and simple, and so strongly advise you to follow the coloured links on the PDF version of this booklet for further information on subjects of interest.

Google

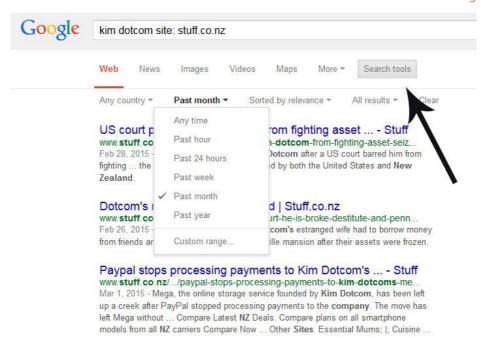
Despite the fact that everybody uses Google, few users are aware of the most effective functions available for more advanced research. For example, search operators. They can be very handy for narrowing down the output (sometimes from thousands of useless results to many fewer that are relevant) or to verify information. The most common ones are:

- "" quotation marks. When you put a word or phrase in quotes into the search bar, the results will only include pages with the same words in the same order as those inside the quotes. Only use this technique if you're looking for an exact word or phrase, otherwise you'll exclude many helpful results by mistake. (Example: "imagine all the people", is very effective to trace the source of a piece of text, a song in this case. It can also be used for personal names).
- a hyphen. Mainly used to remove words. When you use a hyphen (like a minus sign) 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. If you wish to search for jaguar the animal then you can enter the search criteria, 'jaguar speed -car'.
- Related: This is useful for finding pages and websites similar to the one you're analysing. For example, you can find all similar pages to nzherald.co.nz, by typing in 'related:nzherald.co.nz'. This could be very handy for verification purposes.
- Site: This is used to search within a specified website or domain and its contents.
 For example, to search for Kim dot com on Stuff's website you can type, 'kim dotcom site:stuff.co.nz'.

It's very important to familiarise yourself with all the available search operators in Google, as they can be genuine time-savers as well as representing the means to find the information you are interested in.

Another important feature of Google is represented by the many tools you can use to further narrow down a search when operators are not enough, or if you want to search for different kinds of data (e.g. images associated with the name of a person). Search tools can be used in combination with operators (see picture in the following page).

First of all, especially when fact-checking or verifying news, websites and people, it is important to look for the most recent results and not the most popular. However, search results are usually sorted by "popularity" (a recent fact or information about something specific is unlikely to be popular, hence the need to use all the tools available to customise a search). Clicking on "search tools" then on "any time" will give you access to several options to narrow down results, for example looking for the most recent ones.



It's also always helpful to check the other tabs, as searching with the same keywords or search phrase in Google Maps, Google Images, News and Videos might lead to important clues when attempting to verify information. The search tools available change according to the tab you're on. Bear in mind there is no secret recipe to find the information you're looking for, it's mostly about connecting the dots and using Google and the other tools described in this paper as a means to find the clues.

Sometimes it can be also useful to perform an advanced search in Google. From that main page it is possible to further refine your parameters, making the search engine take notice of, for example, the last updated date, usage rights (very useful) or page language.

Also make sure that your personal preferences in Google do not somehow prevent you from getting the right results (this often happens on shared computers or home computers). Actually, since Google provides users with custom search results based on your profile, it would be advisable to perform professional queries from a different, clean browser in order to get un-biased, un-tailored results. Since Google is also location-sensitive it is sometimes useful to manually go to the generic Google.com website through this link and to turn off location detection for the same reason. Furthermore, keep in mind that searches performed from mobile devices are somehow biased since a basic location identification is always possible.

Further Reading:

- Think you know how to Google? Here are 36 search tips you probably don't know about
- Top 10 Clever Google Search Tricks
- Video (3:10 min): Become a Google Search Guru
- Learn more about what you can ask Google (Google and natural language queries)
- Google search app can now handle more complex queries Further improvements on natural language queries

Facebook

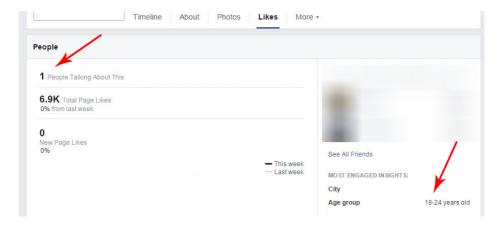
Facebook is one of the most famous and popular social media platforms, and some of its features can be useful when searching for people, their profiles or the contents they share. Facebook policies and features, though, tend to change very often and are not always available to all users or in all countries.

Until December 2014, all "public" content was quite easily searchable in Facebook for users of the English version of the social media. Unfortunately, this search feature called "Graph Search" has been redesigned and public posts are no longer searchable. It is still possible to search through posts, but only those which belong to friends or pages you have liked. Also, other websites such as OpenStatusSearch.com have stopped working as a consequence of Facebook's policy change. Things may alter again in the near future if Facebook decides to challenge Google as a search engine.

Here is a list of some interesting features of Facebook that might be useful when checking someone's profile or in general when looking for information for verification purposes.

- It's important to set Facebook to the English (US) version and not other languages or other versions of English, such as "UK" in order to be able to use some of the *Graph Search* features.
- It is advisable to read the search basics as well as the search privacy help pages to
 understand how those concepts could be used to find someone or their content.
 Indeed, the same privacy rules that apply to our posts can be sometimes used to
 read other people's posts (eg: old posts left "public" after a privacy setting change).
- A lot of people do not care too much about their privacy, and so many posts and
 activities might still be set as "public". Furthermore, Facebook often tries to revert
 custom privacy settings to public whenever "possible" (new uploads, mobile devices
 with different privacy settings than desktop ones etc.). Indeed, relevant content,
 such as pictures or videos uploaded from mobile devices, is likely to be automatically
 set as public.
- It is still possible to narrow down a people search in Facebook by choosing a city, education provider or even an email address! (given that our target person actually gave this information when filling in their profile). Check, for example, the "Find Friends" section or try a natural language query in the search box (For example, "John Smith in Auckland" or "Jane Doe in Wellington who studied at Victoria University").
- Once we find a profile, e.g.: John Smith, we can ask Facebook (in the search box) to list things such as "pages liked by John Smith" or "Posts commented on by John Smith". Facebook will filter the results and allow us to see the available (public) activity performed by John Smith. This is one of the features of *Graph Search*.

- Generation-Y (Millennials) users tend to be very active and to share things with a
 "public" privacy setting. Furthermore, they often use the same nickname / handle /
 username across several social media platforms.
- Cached copies of posts might be available (see "Archive.org" section) and read here how to get the link for a specific post so you can search a cached copy of it.
- When it comes to Facebook pages that are a source of controversial content, it's always worth checking whether these pages are genuine or not (keep in mind that Facebook is changing *Graph Search* and some functionalities might be unavailable). Indeed, it's quite easy to buy followers / likers on most social platforms so checking engagement, comments (quality of the comments), likes, pictures and the real activity will tell us a lot about who's behind that page. For example, a page with 6900 likes and only one person talking about it? That's strange!



Further Reading:

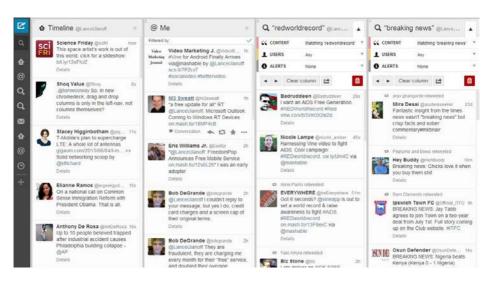
• 6 Facebook Graph Search Tricks No One Talks About

Twitter / Tweetdeck

Even if Facebook is the most popular social media platform, especially in New Zealand, Twitter represents a powerful ally when it comes to finding, filtering, searching, organising and verifying information about facts, events, places and people. For any journalist, it's highly recommended that you have a Twitter account to be able to use its tools, regardless of whether you are actively using it personally. In general, it is advisable to have an account with all major social media platforms for the same reason. Just like Google, Twitter features a very powerful search engine, search operators and a page dedicated to advanced search.

The real power of Twitter, though, is its speed and the fact that if you properly set it up, you can instantly find information about something or someone and have this information updated in real-time. Tweetdeck is what enables anyone to do this, as it's one of the most powerful social media tools for journalists.

TweetDeck's interface consists of a series of customisable columns, which can be set up to display your Twitter timeline, mentions, direct messages, lists, trends, favourites, search results, hashtags, or all tweets by or to a single user". Therefore, it can be successfully used as a sort of social media "police scanner", once you familiarise yourself with it and set up the columns you want with the filters you need. Needless to say, it could allow you to fact-check almost in real-time.



Further Reading:

- 10 Useful Twitter Search Tips and Tricks
- Joanna Geary: Useful 3rd-Party Tools for Twitter

- How I learned to stop worrying and love new Tweetdeck
- Screencast (Silverlight Plugin Required): Create advanced search columns in Tweetdeck
- Geolocate a whole Twitter account (useful to check somebody's movements) with Geosocial Footprint
- Curator, the new free platform by Twitter to compete against Storify
- Twitter Circle of Friends Provides information about the Twitter network of social connections of an account
- Followerwonk Among other things, it allows to analyse who follows and who is followed by a given account

Whois

One of the most powerful tools available to find out who owns or runs a website is the whois database lookup (pronounced "who is"). Indeed, it includes a list of every domain name registered in the world. Whenever a domain is registered, the person buying the domain has to provide personal information, such as a name, phone number and address, as required by ICANN. That information goes into the Whois database, which is searchable, so if you own a domain and someone looks it up in the Whois database, they can see your personal details.

There are several websites that allow you to search through the online records and that display all the available information about a given domain name. This information may also include, for example, some technical details such as the domain's name servers (DNS), and certain status information such as if the domain is locked.

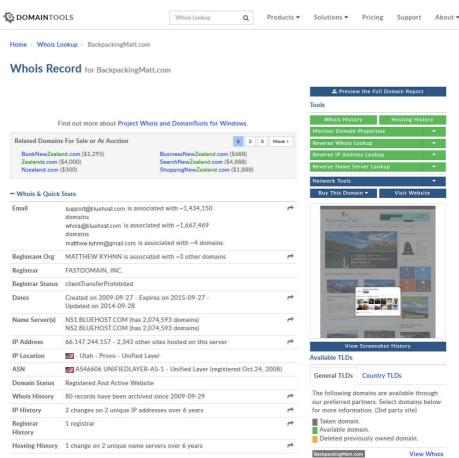
My favourite website for this task is Domain Tools. There is also a specific tool provided by the New Zealand Domain Name Commission. Some hosting providers do not allow external tools to access their database. Nevertheless, they must provide an internal search engine to allow the whois lookup of the websites they host.

See the following page for an example of the report you get when performing a whois lookup. As you can see you can gather some very important information such as:

- Name of the person who registered the website
- Email address of that person
- Phone number of that person (you can see it scrolling down the online report) and sometimes their home address
- When the website was first set up
- Location of the server, that is where the website is hosted
- Name and details of the hosting provider (therefore the holder of all the information)
- Whether this person and/or their associated email address runs/owns other websites
- Hosting history and other SEO data

For verification purposes it should also be remembered that:

- Some hosting providers allow certain sensitive data (name, email, phone number) to be hidden for an extra fee. Usually, though, this does not apply to smaller / personal websites and blogs.
- Some websites are directly registered by companies so further research on the company name will be required.
- Some details are extremely useful for cross-checking. The age of a website as shown by the whois lookup should match what is shown by the waybackmachine (see next tool "archive.org"). If not, that is something to think about!



• If an email address is present, it can be used on social media search engines. Also remember that the first part of an email address is often used as the nickname (maybe with slight variations) on social media platforms.

Another easy thing you can do, even if you're not coding experts, is to check the source code of the home page of the website. In most cases it will be helpful, providing extra information and clues about the people who run it. For example, it might show you whether it was made by a company (the name of that company might not appear clearly on the website). If so, we might investigate the company as well.

Furthermore, finding that a website was made using a CMS (Content Management System) might lead us to think it's a self-made website, a personal blog, and there's not a lot of work behind it (even though some important corporate websites run on CMS!).

This is how the source code of backpackingmatt.com looks:

Indeed, this one looks like a personal website made with Wordpress. You can see the name and version of the theme used and scrolling down you can see more information that would indicate that it's a genuine home-made website.

In general, some important things might show up, especially if you have the chance to work with or know someone who is knowledgeable in this area, such as a web developer or coding expert. Things to look out for are:

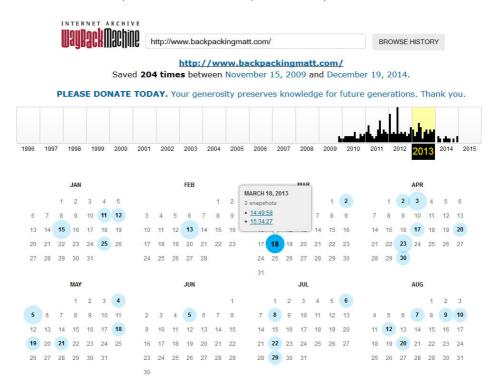
- How the website was made, when, by whom
- Links to social media profiles that might not be visible in the page as you see it in the browser
- Links to analytics or advertising accounts
- Links to images that you might not be able to download normally
- Technical information about plugins and software used (how much money was invested in the website)
- Clues from the meta tags, keywords, titles used within the code
- Access to hidden sections of a website (requires good technical skills)

Further Reading:

IP Lookup allows to trace a website's location starting from its IP address

Archive.org

The internet archive offers many resources of different kinds, but the most interesting one for verification purposes is the waybackmachine, a tool that offers the chance to go back in time and see (sometimes actually navigate) a given website or page as it looked days, months, years ago. This also means that you have the chance to read and see websites that are no longer available or to see them before they were changed for some reason. As you can imagine, there are many implications for this. Using the same website as an example, here is how the output of the waybackmachine looks:



The graph on top shows the number of cached copies (stored copies) available per month (and clearly shows how old the website is / was), while the table underneath shows (highlighted in blue) which days of each month actually feature a cached copy of the website. Furthermore, clicking on any highlighted day, the waybackmachine might return even more than one option per day, stating at what time the copy was stored.

In this case, copies of the website are available starting from November 2009, which matches what we found in the whois lookup. Indeed, the "backpackingmatt.com" website was registered at the end of September 2009 and a couple of months appears

to be a reasonable time for someone to set up a new website, start adding content and get it indexed and cached.

Google uses a cache mechanism as well. When an older copy of a website is available, Google shows the "cached version" link directly within the search output. Unfortunately, Google only keeps recent copies of a given website, but it still may be useful to know how to manually access those copies. For example, to access a website that went offline because of traffic overload (maybe after they shared a relevant UGC story), or to access a page that contained controversial material that has been removed.

Another tool that is becoming increasingly powerful and allows a search on different platforms for different versions of cached website pages is cachedview.com.

Wolfram Alpha



Few people know about the power of this search engine. Wolfram Alpha is indeed much more than a search engine, it's a computational engine that generates structured answers to questions written in natural language.

Let's say for example that you want to know how many airports there are in New Zealand, and you want to know quickly. WA can provide you with an answer (click to see). What if you want to know what's the highest building? What if you wanted to know something about the distance between Auckland and Sydney? Wolfram Alpha can be a very useful tool to perform calculations or to search for scientific or structured answers to verify someone's claims.

WA's approach to information is rather different from anything else. It has an actual learning curve, and offers a tour to learn the basics as well as many examples of what it can be used for.

For the topics covered in this booklet, Wolfram Alpha should mainly be used to fill some gaps in general knowledge when verifying information about people, websites, social media accounts, news etc. As we have seen above, it can be used to provide context to data.

Further Reading:

- 32 Tricks You Can Do With Wolfram Alpha, The Most Useful Site In The History Of The Internet
- 10 Amazing Uses for Wolfram Alpha
- The Best Ways to Use Wolfram | Alpha in Real Life and How to use Wolfram Alpha knowledge engine

Google Maps and GPS

Google Maps is a very powerful tool, probably one of the most advanced web applications available. Besides being an excellent navigation tool, its Street View and Earth features are extremely useful when it comes to verifying locations, distances and areas.

As always with Google products, it is a good idea to check their online quick guides and videos to get an overview of the main features and less known tips and tricks. Today Google Maps includes the most important tools of Google Earth, including the *tilt view*, together with Street View (video), to help evaluate point of views, distances, and surroundings of an event. For example, if something happens in a given location, we could investigate almost everything at that location with Google Maps, looking for any kind of clues (second entrances, CCTV cameras, which shops to call for further information etc...).



In the pictures above we can see the Auckland War Memorial Museum, with some relevant pictures of the location and its surroundings shown at the bottom. The two white arrows indicate the tilt switch (to enable this view in Google Earth/Maps) and that a "photosphere" (a 360 degrees picture), taken from the rooftop of the museum, is available. Photospheres are often more accurate and feature a higher detail level than normal Street View imagery.



Furthermore, images at the bottom of the Google Maps / Earth page (the imagery overlay can be activated anytime by clicking on the double-arrowed icon underneath the "+" and "-" buttons) can often be helpful finding things otherwise not visible from the normal aerial / 3D view. See the example of the falls in the Waitakere Ranges.

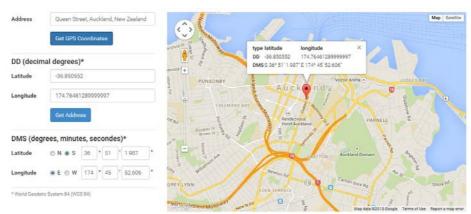


Keep in mind that in cities, "photosphere" pictures of the inside of buildings, such as offices, companies, shops etc, are sometimes available, thereby providing us with further reference or evidence about a place.

Google Maps is extremely useful when we have to deal with user generated content not only to verify images (see other guide), but also to understand the context of a fact or to verify claims that may involve distances, buildings, or any point of interest. Indeed, we can easily check what can be seen and from where; we can check, for example, what there is within a certain radius of a given location, or measure the distance between multiple points on the map... and much more.

Before working with coordinates and GPS data though, it is advisable to check this short summary about the topic, featuring some examples and an explanation of the terminology commonly used in this field.

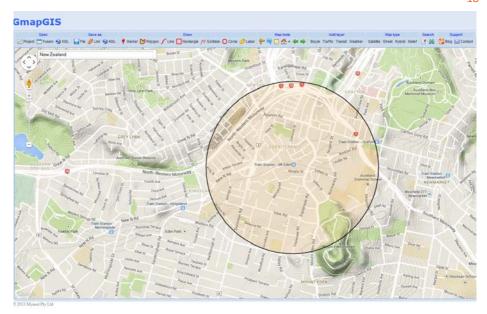
Indeed, if you have to find a place starting from coordinates in either decimal or sexagesimal format, or just convert coordinates between the two systems, gps-coordinates.net provides a clean, easy interface for this task. Also you can retrieve the coordinates starting from an address then you can refine the position simply by clicking on the map.



Keep in mind that all modern GPS-enabled smartphones feature interesting navigation capabilities and there are many free apps for both iOS and Android devices that can be used for this purpose. On Android devices, it is advised to check GPS Status, which is a lightweight app that can tell your exact location, provide coordinates, work as a compass, bubble/spirit level and more.

On iOS devices you may check the native Compass App or low-cost apps such as Nav Clock.

If you wish to draw on or mark up (perhaps for personal reference while investigating something) a Google Map, one of the easiest tools is GMapGIS. See the example of a 1Km radius circle around Mt Eden Station in Auckland in the following page. Another useful tool is Scribble MAPS.



Furthermore, it often happens that Bing Maps is more accurate than Google Maps, especially when it comes to aerial views of remote locations of the world. As an example, some regions of Pakistan, such as the city of Peshawar, appear to be more detailed in Bing, than Google. Clicking on the links you will see the school that was attacked in 2014 by the Taliban. Bing maps provides more detail and an easier understanding of the layout of the school. We used this map instead of Google's to help verify pictures that were allegedly taken there. Indeed, it would be always advisable to check Bing Maps while working. Sometimes, even a slight difference in the map's data can be helpful.

Further Reading:

- How to time travel with Google Maps (Amazing tool to see how something looked in the past). Try this link, go back to 2008 in Jellicoe Street, Auckland and see what has changed since then
- 18 Google Maps tricks you need to try nice selection of tips about Google Maps. Some of them could be extremely useful for the purposes of this guide

Pipl.com

Pipl.com is a very handy tool when it comes to searching for clues about a name you are interested in. Just entering a name and a location (if needed) you might end up with interesting connections with social media profiles or pictures. As of today, it still manages to retrieve a picture of a person that was removed from the internet more than one year ago and still points to the social profile this person used to have. It's always worth trying different names, spellings and variations (e.g. try both "Chris" and "Christopher") and try with and without the location, regardless of the fact that

Another similar tool with a specific search field for social media user names is PeekYou.

TradeMe

we already know it or not.

In the specific context of New Zealand, TradeMe represents one of the most popular websites. When looking for information about someone or something in the country it might be worth trying here. Indeed, we always have to keep in mind that people often use the same nickname, handle, account name across several platforms and we can lookup a specific username also in TradeMe.

If we find a person in TradeMe we get to know something about his / her transactions, what he / she is interested in and we might be able to track him / her down if needed, by subsequently searching with Google, Pipl.com and on social media platforms.

You can practice by starting from any TradeMe username and see what information you get when searching on Google and a selection of social media. On the other hand, you might want to check for usernames you already know and see if you can track them on TradeMe. Keep in mind that, unlike Google, TradeMe will only return the exact match (if any) for your query. For example, "Jack" will only show the profile of the user "Jack" and will not list other users such as "JackSmith" or "Jack23".

Further Readings and Tools

- Ban.jo, specifically focused on Australia and New Zealand. They claim to be "the
 world's largest collection of social signals organized by time, location and content.
 We index and curate breaking news and events faster than any organization on the
 planet so that you have an all-access pass to anything, anywhere". It's a social media
 aggregator that allows the crosschecking of media from events across several social
 platforms.
- 5 tips for finding anything, about anyone, online
- Try searching for people and usernames also on PeekYou
- Verifying Social Media Content: The Best Links, Case Studies and Discussion
- Verification Handbook: Case Study 2.1: Using Social Media as a Police Scanner
- Journalist Toolbox
- Emergency Journalism Verification And Validation Tools
- 12 social media tips, tools and techniques to help journalists work better.
- Best Practices for Social Media Verification.
- Check available (free) browser extensions that allow to search for people both on Firefox and Chrome.
- Check extensions such as Storyful Multisearch for Chrome.
- Rapportive, a Gmail plugin that allows to check sender's social media profiles inside your mailbox
- Other useful resources on Verification Handbook website.
- Additional material available on the Verification Handbook website.
- (Paid) Course Getting It Right: Accuracy and Verification in the Digital Age
- Tools for verifying and assessing the validity of social media and user-generated content (Features many links)
- BBC Academy (Video) How to make the most of user-generated content (UGC)
- Storyful's validation process A useful list of questions you should ask yourself while working with UGC
- Buzzsumo a free (though a free account may be required) tool to find and analyse
 what's trending on social media. Allows to quickly filter the most shared contents
 across several platforms. Paid version available.

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