Bilingual toolkit for journalists covering Latino communities in the U.S.
Tools, examples and recommendations

By: Tamo Calzadilla, from factchequeado.com

With the support of Chequeado Educación and Maldita Educa teams
**About Tamoa Calzadilla and Factcheckado**

*Tamoa Calzadilla* is a leading journalist in investigative and fact-checking teams in the United States. A Venezuelan immigrant with 30 years of experience, she has been serving Spanish-speaking communities since 2015. She is Editor-in-Chief of *Factcheckado*, a collaborative initiative to combat mis- and disinformation affecting Latino communities in the United States that publishes fact-checking articles and videos, along with explanatory content, while building an alliance with media outlets and organizations across the country. *2023-24 Reynolds Journalism Institute Fellow*. In 2022, Calzadilla was recognized on Forbes’ list of the 100 Most Creative People in Business. She was the director of *elDetector*, the fact-checking platform of Univision Noticias (the first Spanish-language fact-checking platform created in the U.S.). She was also part of the Pulitzer Prize finalist team for collaborative work on #FinCenfiles (2021) and the investigative team that produced the Panama Papers (ICIJ, 2016). She received the Special Citation from the Maria Moors Cabot Prize in 2014, among other recognitions.

If you have any questions contact me at:
tcalzadilla@factchequeado.com.
INDEX

1. Why we created this guide
   1.1 Why are Latino communities vulnerable to mis- and disinformation? > Go to page 4
   1.2 How familiar are journalists with tools to combat mis- and disinformation? > Go to page 4

2. Map of some useful tools and tutorials for journalists > Go to page 6

3. Keys to reaching Latino communities
   3.1 Listening to audiences on WhatsApp and social media > Go to page 7
   3.2 The best strategies and methods to engage with Latino communities > Go to page 7

4. Terms and facts to keep in mind when covering Latino communities
   4.1 Hispanic, Latino or Latinx? > Go to page 9
   4.2 Why we prefer “Latino communities” and not “Latinos” or “Hispanics” > Go to page 10
   4.3 Topics where misinformation, disinformation, and lack of information are prevalent > Go to page 10
   4.4 Data that debunks myths and stereotypes and how to use them in your coverage > Go to page 12

5. Reliable sources to consult > Go to page 14

Credits > Go to page 128
Journalists covering Latino communities in the United States face the dual challenge of reporting and combating mis- and disinformation while interpreting and understanding the diversity of issues that affect these communities. Despite the growth of this population and the Spanish language in the United States, there is currently an insufficient number of media outlets that target these communities as their primary audience. As a result, Latino communities can miss out on crucial information in their native language. For this reason, in April 2022, Factchequeado was born with the aim of fighting misinformation in Spanish and creating a large alliance of media and civil society organizations to achieve it.

1.1 Why are Latino communities vulnerable to mis- and disinformation?

- Quality journalism in Spanish is a very scarce commodity, and misinformers take advantage of this: they use information deserts to sneak in false or misleading content that undermines democratic institutions or affects voting rights, health, migrants’ rights, and other needs.
- Language is the first barrier that creates information deserts.
- Latino communities are more likely than others to communicate via WhatsApp and Telegram, which creates a higher risk of receiving disinformation through these channels.

As journalists, our goal is to meet the needs of our audiences with useful, quality, detailed and accurate information. However, a survey conducted by Factchequeado in 2023 among media outlets covering these communities showed that they (we) have an uneven knowledge of the tools and applications that exist today to detect and combat the disinformation that circulates online. While Google’s tools were the best known, journalists showed a greater lack of knowledge about tools to detect images generated by artificial intelligence. In addition, they expressed interest in knowing the terms to use when referring to Latino communities, as well as having a list of knowledgeable and reliable sources that specialize in this population.

1.2 How familiar are journalists with the tools to fight disinformation?

At Factchequeado we have a network of 60 (by November 2023) media partners and institutions that serve Latino communities, who reproduce the content we produce in their media and social media. In turn, they allow us to learn about the issues that affect the different communities they serve. In June 2023, we asked them what tools and skills they would need to learn or develop to do their jobs better. We also asked them to rate a number of tools from 1 to 5, with
(1) being the least knowledgeable and (5) being the most knowledgeable. Thirty-four of them responded: 29 in Spanish and 4 in English.

**Some results:**

- More than 85% of respondents are familiar with (4 and 5 points) and know how to use Google Reverse Images, a tool to check if an image has been published before in a different context than the one in which it is being used.
- 100% of respondents consider it very useful (4 and 5 points) for journalists to be familiar with this tool.
- More than 68% (4 and 5 points) say they have a good knowledge of Google Earth to do geolocations.
- More than 64% are familiar with Tweetdeck (between 4 and 5 points), a tool that allows specific searches on Twitter (now X) by publication date and number of publications or followers.
- When asked about the importance of learning to identify images and videos created with artificial intelligence, everyone agreed that it was very important (5 points) and only two people put their level of importance at 3 and 4, respectively.
- 100% said they were unaware of tools such as Hive moderation (1 and 2 points) to identify images created with artificial intelligence.
- All considered it essential (between 4 and 5 points) to have a guide on how to identify disinformation circulating in public discourse. The same happened with the responses on the usefulness of having a handbook of reliable sources that work and provide reliable information about Latino communities.

In this context, this guide presents a series of tutorials on the best tools to verify information and content, as well as some keys to reaching and engaging Latino communities with quality information. It is based on the author’s over 10 years of experience combating misinformation in Spanish, along with the teams of Chequeado Educación and Maldita Educa. The guide also provides background information to help journalists avoid reproducing the main myths and stereotypes that circulate about Latino communities, and a list of reliable sources to consult when reporting on news affecting them.
## Map of some useful tools and tutorials for journalists (bilingual)

This section presents a map of useful tools to combat misinformation, describing who they belong to, whether they are free or require a subscription or payment, in what cases they can be used, a step-by-step tutorial on how to use them, and examples of how we have used them at Factchequeado.

<table>
<thead>
<tr>
<th>To verify content in general</th>
<th>To verify images: photos and videos</th>
<th>To archive content and find deleted items</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Google Advanced Search</td>
<td>• Imágenes de Google</td>
<td>• Wayback Machine</td>
</tr>
<tr>
<td></td>
<td>• Yandex</td>
<td>• Archive.is</td>
</tr>
<tr>
<td></td>
<td>• Bing</td>
<td>• Perma.cc</td>
</tr>
<tr>
<td></td>
<td>• InVID</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• FotoForensics</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>In X (formerly known as Twitter)</th>
<th>Artificial Intelligence (AI)</th>
<th>Geolocation</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Advanced Search</td>
<td>• Hive Moderation</td>
<td>• Google Earth</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Traffic and trends</th>
<th>Tools for discourse verification</th>
<th>Chatbot WhatsApp</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Google Trends</td>
<td>• Fact Check Explorer</td>
<td>• Factchequeado</td>
</tr>
<tr>
<td>• CrowdTangle</td>
<td>• El Desgrabador</td>
<td></td>
</tr>
</tbody>
</table>

You can continue reading through the toolkit or click on each tool to go directly to the tutorial.
03.

Keys to reaching Latino communities

3.1 Listening to the audience on WhatsApp and social media

Pew Research shows that Hispanics (46%) are much more likely to say they use WhatsApp to communicate than African Americans (23%) or Whites (16%) in the United States. Nielsen's 2021 report details that Hispanics aged 18-34 are twice as likely to use messaging media apps like WhatsApp and Telegram as the rest of the population, putting them at greater risk of receiving misinformation through these channels.

At Factchequeado, together with our media allies and the support of a consulting firm, we conducted a study showing the vulnerability gaps in Spanish-speaking communities when it comes to information. This highlighted not only the language barrier, but also the more widespread use of WhatsApp and social media for information.

Using WhatsApp to inform and reach Hispanic audiences is just as important as using it to listen to them, receive their concerns, questions and feedback. The key is to reach Latino communities with journalistic content designed for the platforms they already use to communicate. Therefore, establishing communication channels such as WhatsApp and social media is a good way to know what they are looking for, what they care about, what kind of misinformation or rumors are circulating, and also to know if our message is being received as we want it to be.

3.2 The best formats to engage with Latino communities

To communicate our journalistic content to Latino communities, it is essential to use formats that are user friendly on social media and messaging apps such as WhatsApp. That's why we recommend creating short video clips, animations, audio with or without graphics, and sharing them on various social media platforms. In other words, it is essential to speak the same “language” and to be present in the same applications where disinformation that affects our audience is circulating.

At Factchequeado we have tested some of our videos and we have found out that they are effective, especially when the content directly states if some news is “true” or “false.” We also proved that the image of a journalist explaining his findings in front of the camera has a positive effect and creates trust in the audience.

Instagram reels and/or TikTok video formats are currently (January 2024) the most effective in terms of reach and engagement. Although the subject matter of the content is often more or equally important than the format in which it is told, the same popular platforms and successful influencers emphasize the use of video as the most effective and successful format. Videos need to be dynamic, with movement, fast
and illustrative, and should have captions, as users often consume them without sound.

Here are some examples:

**Media literacy reels on Instagram:**
- Cómo darte cuenta que una imagen es falsa
- Herramientas, datos y fuentes para el conflicto bélico de Israel-Hamas
- Tips para detectar desinformación
- Cómo hablar con un familiar que difunde desinformación por WhatsApp

**Explainers:**
- 7 claves para entender el caso criminal de Bob Menéndez
- 7 claves del caso criminal contra Trump por el intento de invalidar el resultado de las elecciones de 2020
- Qué sabemos sobre el aumento de casos de Covid en Estados Unidos

**Verifications or warnings of misinformation:**
- Aplicaciones que te pagan por caminar: son un engaño
- No, este video no muestra cómo empujan a un niño a un lago cuando pasa un caimán: es una broma con una cabeza “fake” de alligator
- Cuidado con esas cadenas de WhatsApp que te advierten sobre unas fotos que van a hackear tu celular en 10 segundos: son un engaño
- Aplicaciones que prometen hacerte ganar dinero a cambio de realizar tareas fáciles: suelen ser estafas

In addition to the chatbot that has been active since April 2022, recently at Factchequeado we opened our WhatsApp channel as a Spanish verification platform, and within a month, we reached a larger audience than what we have accumulated in over a year on Instagram.
Terms and facts to keep in mind when covering Latino communities

4.1 Hispanic, Latino or latinx?

*Reporting on Latino/a/x communities* (Routledge, 2022), edited by Teresa Puente and others, explains the need to better prepare journalists who serve these audiences. It also reveals huge gaps in news coverage, a stigmatization of the Hispanic and Latino population that portrays them mostly as victims, in poverty, or mostly undocumented immigrants. At the same time, the publication warns that journalism is not adequately covering these gaps: “The lack of professional preparation to understand the complexity of socio-demographic changes becomes the first challenge for newsrooms” (p. 3).

The book also explains that “Hispanic” refers to those who have Spanish as their common language, while “Latino” refers to those who have their origins in Latin American countries. In this sense, for example, a person of Brazilian origin is Latino but not Hispanic, and someone of Spanish origin is Hispanic but not Latino. In addition, the term “Latinx” was born to seek gender inclusion in these communities, although it is more popular among liberals and young people.

According to data from the Pew Research Center, there is a tendency among these communities to prefer the use of the identification “Hispanic”, while only 3% said they use “Latinx”. The discussion of both terms is dynamic and, like language, their use is constantly evolving.

The U.S. Census uses the terms “Hispanics” or “Latinos” interchangeably to classify these groups of people, and estimates that this population has grown to 63.6 million in 2022, making people of Hispanic origin the largest ethnic or racial minority in the country: 19% of the total population.

In addition, according to the U.S. Census Bureau, *Spanish is the second most widely spoken language in the United States after English, with more than 41 million people speaking it regularly at home.* This is nearly 12 times more than Chinese, the next most widely spoken language in the United States. This makes the United States the fifth most Spanish-speaking country in the world, only behind countries where Spanish is the native language: Mexico, Colombia, Argentina and Spain.

However, the avalanche of misinformation these communities receive through the various platforms they use to inform themselves on their mobile phones is not matched by the quantity -and quality- of resources to counter it, as the *New York Times* wrote.
4.2 Why we prefer “Latino communities” and not “Latinos” or “Hispanics”

When covering Latino communities, it is important to keep in mind that we are not talking about a monolithic group: they are diverse communities that behave differently and are affected differently on a variety of issues. For this reason, we prefer to talk about “Latino communities” rather than “Latinos” or “Hispanics.”

Where these communities come from, their age, their socioeconomic status, their level of education, and where they live in the United States are all important in understanding what kind of information they need. For example, these communities do not have the same information needs or behave in exactly the same way whether they live in South Florida, where there is a majority of Cubans; in Central Florida, where there is a majority of Puerto Ricans who are U.S. citizens by birth; in the nation’s capital, where there is a majority of Central Americans; or in the states bordering Mexico, where there is a majority of Mexicans.

The Pew Research Center updates demographic data on these groups according to their country of origin.

4.3 Topics where misinformation, disinformation and lack of information are prevalent

When journalists have to cover a story that particularly affects and interests Latino communities, we cannot ignore the context, nor can we assume that everyone in the audience knows the history, reasons and figures that give a more accurate picture of what is being discussed. That is why we make sure to provide them in every article, at every opportunity we have to explain the complex issues, laws and policies that affect them (us).

To better serve the information needs of these communities, this guide identifies reliable sources of information (researchers and experts from public and private organizations) that generate data to contextualize the facts.
In addition, to identify topics of misinformation and information gaps affecting the Latino community, in May 2023 at Factchequeado we surveyed our media partners on different issues where previous research had identified misinformation or information gaps among the Latino population. We received 17 responses from 15 different organizations. Specifically, we asked them to rate information problems related to:

- COVID-19;
- health issues;
- administrative formalities or migratory processes;
- political issues;
- voting processes in elections;
- climate change;
- feminism and gender policies;
- LGTBIQ+ rights.

We also asked for their opinions on other topics related to how and why misinformation affects Latino communities. For each topic, participants were asked to rate the amount of misinformation they had noticed on a scale of 1 (no problem) to 5 (huge problem). In addition, they were asked to provide specific examples or reflections on information problems they have encountered in their daily work and interactions with Latino communities. The following charts show the results:

When analyzing the lack of reliable information (graph below), LGTBIQ+ rights and COVID-19 presented significant results. The former has a very high score. Respondents wish more reliable information had been available, when in the previous classification (graph above), disinformation was not as much, in comparison to the rest. With the COVID-19 is the opposite: It is placed within the first positions when it comes to disinformation (graph above), but participants do not think reliable information is lacking, and it is second-to-last in that ranking (graph below).

This study underscores the need for this guide to provide links to data organizations and experts who are reliable sources of information about Latino communities in the United States. The following section provides some examples of how background information can be used in reporting on some of these issues.

4.4 Data that debunks myths and stereotypes and how to use them in your coverage

This time, we will use as an example the coverage of immigration, immigration processes and Latino communities. When we talk about Latino communities, Hispanics in general, we tend to think of them (us) as immigrants, as people who are transient or undocumented in the United States. But this is a mistake, and it is the responsibility of every journalist who covers these issues to remember that only 19% of Latinos living in the United States are immigrants, according to the most recent data from the Pew Research Center based on the 2021 American Community Survey.

Thus, we can see that classifying Latino communities as such based on their immigration status is not very accurate, since 81% of Latinos are U.S. citizens, either because they are Puerto Rican (they have U.S. citizenship at birth) or because they were naturalized according to the rules of this country. In other
words, most of the people who make up Latino communities in the United States have the same rights and responsibilities as any other citizen.

The Pew Research Center’s Hispanic/Latino Division is dedicated to researching and reporting data that serves as a reliable reference for our work. The U.S. Census publishes visualizations and disaggregated data specific to this population, and the American Community Survey annually updates data that Pew Research Center says helps local officials, community leaders and businesses understand changes in their communities. It is the leading source of detailed information on population and housing in the United States.

Some of the data provided by the Pew Research Center’s “11 facts about Hispanic origin groups in the U.S.”, show that according to the latest estimates (2022), there are 63.7 million “Hispanics or Latinos” living in the United States.

The Pew Research Center explains that births in the United States to Hispanic parents outpaced the arrival of new immigrants between 2010 and 2021. As a result, the U.S.-born Hispanic population grew by 10.7 million, while the immigrant population grew by 1.1 million. The same source explains that in 2021, immigrants made up a smaller share of nearly all Hispanic-origin groups in the U.S. than they did in 2010: “The largest declines were among Hispanics of Ecuadorian and Nicaraguan origin, each by 11 percentage points. Venezuelans were the exception: the share of immigrants increased from 69% to 76%.” This phenomenon corresponds to the growth of Venezuelan migration, which, according to Pew Research, increased by 169% between 2010 and 2021.

One thing is clear from these data: the vast majority of Hispanics and Latinos in the United States are U.S. citizens: 81% in 2021, compared to 74% in 2010.

The other data useful to contextualize coverage of immigration, migration processes, and Latino communities relates to people living in the United States without immigration documents.

For example, in Factchequeado we published the article “No, Illinois is not allowing ‘illegal aliens’ to be part of the police force: the new law applies to immigrants with work permits and federal gun permits,” which, in addition to combating misinformation about the inclusion of immigrants in the police force, provides some numbers as context. For example, while the total population of the United States is about 335 million people, the number of undocumented immigrants is estimated by the Migration Policy Center and the Pew Research Center to be about 11 million, or 3.2% of the population.
## Reliable sources to consult

<table>
<thead>
<tr>
<th>Issue</th>
<th>Institution</th>
<th>Expertise</th>
<th>Link</th>
</tr>
</thead>
<tbody>
<tr>
<td>Immigration</td>
<td>Migration Policy Institute</td>
<td>Detailed indicators</td>
<td><a href="https://www.migrationpolicy.org/">https://www.migrationpolicy.org/</a></td>
</tr>
<tr>
<td></td>
<td>Bipartisan Policy Center</td>
<td>Immigration analysis from a bipartisan perspective</td>
<td><a href="https://bipartisanpolicy.org/">https://bipartisanpolicy.org/</a></td>
</tr>
<tr>
<td></td>
<td>American Immigration Council</td>
<td>Data and analysis</td>
<td><a href="https://www.americanimmigrationcouncil.org/">https://www.americanimmigrationcouncil.org/</a></td>
</tr>
<tr>
<td></td>
<td>American Immigration Lawyers Association</td>
<td>Data, analysis and legal experts</td>
<td><a href="https://www.aila.org/">https://www.aila.org/</a></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Inflation: <a href="https://www.bls.gov/cpi/">https://www.bls.gov/cpi/</a></td>
</tr>
</tbody>
</table>
| Violence and security  | Gun Violence Archive                      | Violent deaths, shootings                            | [https://www.gunviolencearchive.org/about](https://www.gunviolencearchive.org/about)  
|                        | The Violence Project                      | Violence prevention, mass shootings                  | [https://www.theviolenceproject.org/mass-shooter-database/](https://www.theviolenceproject.org/mass-shooter-database/) |
|                        | FBI                                       | Crime data                                           | [https://cde.ucr.cjis.gov/](https://cde.ucr.cjis.gov/)                |
| Health                 | FDA                                       | U.S. Food and Drugs Administration                   | [https://www.fda.gov/](https://www.fda.gov/)                          |
|                        | CDC                                       | Centers for Disease Control and Prevention            | [https://www.cdc.gov/index.htm](https://www.cdc.gov/index.htm)        |
|                        | Kaiser Foundation                         | Data and investigations on access to health           | [https://www.kff.org/](https://www.kff.org/)                          |
|                        | OMS                                       | World Health Organization                            | [https://www.who.int/es](https://www.who.int/es)                      |
### Bilingual toolkit for journalists covering Latino communities in the U.S.
#### Tools, examples and recommendations

<table>
<thead>
<tr>
<th>Category</th>
<th>Resource</th>
<th>Description</th>
<th>URL</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Health</strong></td>
<td>MedlinePlus</td>
<td>Medications and supplements, genetics, medical tests, and other health topics.</td>
<td><a href="https://medlineplus.gov">https://medlineplus.gov</a></td>
</tr>
<tr>
<td></td>
<td>Cochrane Library</td>
<td>Medical reviews, articles, experts in Spanish.</td>
<td><a href="https://www.cochranelibrary.com/es/">https://www.cochranelibrary.com/es/</a></td>
</tr>
<tr>
<td><strong>Data and</strong></td>
<td>Census</td>
<td>Official data on population, ethnicity, race, employment, health, housing and other topics</td>
<td><a href="https://www.census.gov/">https://www.census.gov/</a></td>
</tr>
<tr>
<td><strong>investigation</strong></td>
<td>Pew Research Center</td>
<td>U.S. Latinos, languages, information consumption, race, religion, gender</td>
<td><a href="https://www.pewresearch.org/">https://www.pewresearch.org/</a></td>
</tr>
<tr>
<td></td>
<td>American Community Survey</td>
<td>Census updates</td>
<td><a href="https://www.census.gov/pro-grams-surveys/acs">https://www.census.gov/pro-grams-surveys/acs</a></td>
</tr>
<tr>
<td><strong>Elections</strong></td>
<td>Brennan Center en español</td>
<td>Electoral data analysis and electoral experts</td>
<td><a href="https://www.brennancenter.org/">https://www.brennancenter.org/</a></td>
</tr>
<tr>
<td></td>
<td>Voto Latino</td>
<td>Right to vote focused in Latino population</td>
<td><a href="https://votolatino.org/">https://votolatino.org/</a></td>
</tr>
<tr>
<td><strong>Climate</strong></td>
<td>Climate Power</td>
<td>Climate change activists, data, analysis and experts</td>
<td><a href="https://climatepower.us/">https://climatepower.us/</a></td>
</tr>
<tr>
<td></td>
<td>NASA</td>
<td>National Aeronautics and Space Administration</td>
<td><a href="https://climate.nasa.gov">https://climate.nasa.gov</a></td>
</tr>
<tr>
<td></td>
<td>National Oceanic and Atmospheric Association (NOAA)</td>
<td>Climate programs</td>
<td><a href="https://www.noaa.gov">https://www.noaa.gov</a></td>
</tr>
<tr>
<td></td>
<td>Environmental Protection Agency (EPA) in Spanish</td>
<td>Climate programs</td>
<td><a href="https://www.epa.gov/climate-change">https://www.epa.gov/climate-change</a></td>
</tr>
<tr>
<td></td>
<td>About the IPCC</td>
<td>Periodic assessments, studies, reports on climate change in Spanish.</td>
<td><a href="https://www.ipcc.ch">https://www.ipcc.ch</a></td>
</tr>
</tbody>
</table>
# Bilingual toolkit for journalists covering Latino communities in the U.S.
## Tools, examples and recommendations

<table>
<thead>
<tr>
<th>Focus on Hispanic communities</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Naleo</td>
<td>Electoral education, data, analysis</td>
<td><a href="https://naleo.org/">https://naleo.org/</a></td>
</tr>
<tr>
<td>Galeo</td>
<td>Electoral education, data, analysis (Georgia)</td>
<td><a href="https://galeo.org/">https://galeo.org/</a></td>
</tr>
<tr>
<td>UNIDOS US (La Raza)</td>
<td>Latino vote, data, experts, analysis</td>
<td><a href="https://unidosus.org/">https://unidosus.org/</a></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Legislation and government</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>United States Government in Spanish</td>
<td>Services, government divisions, and official information</td>
<td><a href="https://www.usa.gov/es/">https://www.usa.gov/es/</a></td>
</tr>
<tr>
<td>White House</td>
<td>Executive Branch</td>
<td><a href="https://www.whitehouse.gov/">https://www.whitehouse.gov/</a></td>
</tr>
<tr>
<td>House of Representatives</td>
<td>Legislative Branch</td>
<td><a href="https://www.house.gov/">https://www.house.gov/</a></td>
</tr>
<tr>
<td>Senate</td>
<td>Legislative Branch</td>
<td><a href="https://www.senate.gov/">https://www.senate.gov/</a></td>
</tr>
</tbody>
</table>
Google Advanced Search*

Tip for Journalists

The more specific your search, the more useful this tool will be. Google's advanced search allows you to search for exact phrases, exclude terms, define date and value ranges, filter by file type, and even search for terms that appear in headlines and URLs.

What is it?

It is a free tool from Google, owned by Alphabet. Google is the most used search engine in the United States and Latin America. However, many times we do not find the content we are looking for, especially if it is not on the first page of results. On other occasions, the first results are not always close to what you are looking for. Sometimes, those first sites are actually paid ads and necessarily the most relevant results. In those cases, you can use Google’s advanced search.

What is it for?

It is an advanced search engine that allows searching by keyword, date, language, date, file format and other filters.

How to use it

On the advanced search page, the user specifies the words or phrases to search for and narrows the results with options suggested by the tool itself. Search operators are also very useful for filtering content quickly.

To find it, open Google's homepage (google.com) in any browser and right-click on the “Settings” button.

* The examples provided in this guide and the screenshots it presents may vary according to each user's geolocation. The screenshots have been included in the original language in which the search was conducted.
Bilingual toolkit for journalists covering Latino communities in the U.S.
Tools, examples and recommendations / Google Advanced Search

You can also type in the URL of the advanced search page: https://www.google.com/advanced_search.
Advanced Search helps you narrow down the results to find the information you need faster. As you can see, it is possible to limit keywords to an exact word or an entire phrase if you are looking for something very specific. For example, if you need studies on climate change and increased rainfall, you can type those words and find content that links the two terms.

If you need more specific information, such as whether it is raining more in the United States and whether there are studies linking this increase to climate change, advanced search can help you narrow the results by region and/or language. If you are looking for articles, you can further refine your search by selecting items that contain the terms “climate change” and “increased rainfall” in their headlines.

You can also search for scams related to a specific topic.
The search returns verified articles and fraud alerts from government agencies:

Debt Relief and Debt Relief Scams | Office of the …

The two most obvious signs of a potential debt relief scam are: 1. They Contact You First. If you receive an unsolicited call or contact from someone …

People also ask:

- Is the American Debt Relief Program legit?
- Is there really a credit card debt relief program?
- How do I know if a debt consolidation company is legit?
- What is debt relief program?

Debt Relief and Credit Repair Scams
Another filter that can be very useful is to select the type of file you are looking for. For example, if you are interested in research, select files in .pdf format. If you are looking for rainfall volume data, you may get more accurate results by searching for files in spreadsheet (.xls) format.

**Search by custom range**
In addition, there are other tricks that can come in handy, like searching for specific dates. When the results of your search are displayed, click on the “Tools” option located below the search bar. Then click on any date and choose between the different options (last hour, last 24 hours, etc.). With the custom range, you can select the date you want.

**Search operators**
Other shortcuts to improve your results are search operators. They are a series of symbols, each with a different function, that help you get the search results as close as possible to what you are looking for. Some, like quotation marks (“ “) or filetype:, have the same function as some of the advanced search fields -searching for an exact phrase or filtering by file type. The advantage is that if you use them often and remember them, you do not need to open the advanced search page and you can save time by typing them directly into the search bar.
These are some of the most common ones:

" " (quotation marks)

Typing multiple terms in quotation marks will make Google search for the exact phrase. For example, if you type “visas to work in the United States,” you will only get results that include that exact phrase. If you do the same search without quotation marks, you will get results that might only include the word “visas” in relation to other countries, or another one of the terms.

OR

This command is placed between two or more terms. Use it when you want to find results with one term or the other. It can be used as many times as you want in any search. For example: fraud OR phishing OR scam.
Bilingual toolkit for journalists covering Latino communities in the U.S.
Tools, examples and recommendations / Google Advanced Search

How to Recognize and Avoid Phishing Scams

How to Recognize and Avoid Phishing Scams - Scammers use email or text messages to try to steal your passwords, account numbers, or Social Security numbers.

How To Recognize Phishing - How To Protect Yourself From...

People also ask

Is phishing a crime?

Is phishing a cyber crime?

What are the consequences of phishing?

What is an example of phishing identity theft?

Phishing

Phishing is a form of social engineering and scam where attackers deceive people into revealing sensitive information or installing malware such as...

Phishing.org

Phishing | What Is Phishing?

Phishing is an attempt by cybercriminals posing as legitimate institutions, usually via email, to obtain sensitive information from targeted individuals.

Phishing Scams

Phishing is a type of online scam that targets consumers by sending them an e-mail that appears to be from a well-known source – an internet service provider, a...

What is a phishing attack?

"Phishing" refers to an attempt to steal sensitive information, typically in the form of usernames, passwords, credit card numbers, bank account information or...

What is phishing | Attack techniques & scam examples
It is used to search for the two terms between which the command and in the same way as in the previous case: scam AND phishing. If you try this example, you will see that both words appear in all the results.

They are used to separate terms and use several commands at the same time, as if it were a mathematical operation. For example: (disinformation OR deception) AND vaccine. In this case, you would search for the word ‘vaccine’ and one of the two words in parentheses. That is, either ‘disinformation and vaccine’ or ‘deception and vaccine’.

It is written in front of a term to exclude it from your search: disinformation in the United States -fake. Thus, you leave out those results that contain the word ‘fake’.

This command followed by the name of a website without a space indicates Google to show all the results available within that website. For example, if you want to find an article within Factchequeado.com, type the search terms followed by this command: disinformation about the war in Ukraine site:factchequeado.com

Sometimes you want to find a specific type of document, for example a PDF, and not web pages in general. To narrow the search for PDF documents, type filetype:pdf.

It’s used to view the cached version of a specific web page. The cache is a memory that temporarily stores a series of data. When viewing the cached version of a website, you are essentially seeing a sort of screenshot of how that website looked at a particular moment. This data is constantly updated, so the cache changes, sometimes matching the appearance of the website at the time you are accessing it (this happens if no further changes have been made to the website since the last cache update), while other times it won’t match. To view the cache of Factchequeado, type cache: factchequeado.com
To search within a range of numbers (which could be dollars, pounds, miles, etc.), use two consecutive dots without spaces between both figures. For instance, if you type 200..500 dollars or 33..88lb, it will yield results between 200 and 500 dollars or 33 and 88 pounds.

Following a term, this command is used to ensure that the results provided by Google contain that specific word within the URL. For instance, if you add inurl:scams to your search, all the results will have ‘scam’ in their web address.

It is almost the same as the previous one, but in this case, you can include multiple terms separated by a space: allinurl:scam phishing TPS. For instance, with that search, you are adding add ‘phishing’ and ‘TPS’ to the previous search along with ‘scam’.
Search for a specific word within a title. For instance, you can use it like this: intitle:disinformation.

It is similar to the previous one, but for searching multiple words within the title. It is used with the first word written immediately after the colon, followed by the rest separated by spaces. For example, allintitle:the consequences of disinformation.

It searches for websites that include the searched term within their text. intext:phishing will provide results of websites that have that word somewhere within their text.

It searches for multiple terms within the text of a website. Each word has to be separated by a space: allintext:phishing tax agency.

Advanced image search
To search for images, you can also use the advanced image search by accessing the page https://www.google.es/advanced_image_search
This tool searches for images by keywords, characteristics such as color or aspect ratio (square, panoramic, vertical, etc.) and file type, whether you want photographs, pre-designed images or line drawings. You can also select images by their formats, searching for gifs (animated images) or raw photos (if you need very detailed raw photos).

It can also be very useful to find images by their license type and find photos or drawings with licenses that allow their use.

However, advanced image search should not be confused with reverse image search. The former finds images more efficiently, while the latter (explained in the Reverse Image Search: Google Lens Tool) is useful to verify a photo or screenshot.

**Example:**

Google’s advanced search is one of the most used tools by fact-checkers when looking for information and original content that might have been used to spread misinformation, for example.

In this case, American cardiologist Peter McCullough advises against the use of COVID-19 vaccines, **claiming that they are ‘not safe’ for humans.** In his statements, he quotes a study he co-authored and asserts that the conclusion is that 73.9% of deaths post-vaccination are caused by the vaccine.

We can use Google’s advanced search to look for the study and see what it says exactly and how it arrives at that conclusion, **as there is ample scientific evidence proving that vaccines are safe.**

A good idea is to use ‘allintext’ with keywords that might lead us to that study.
The first search result leads to the study mentioned by McCullough.

The first result shows that the study is a “preprint:” it hasn’t undergone peer review or been evaluated by other experts. Consequently, it hasn’t been published in a scientific journal either.

Moreover, we can read that the document has been withdrawn from the server because ‘the study’s conclusions are not supported by the study’s methodology.’ In this article published in Factchequeado, we explain that The Lancet in the Social Science Research Network (SSRN) has the right to remove a document that has been published if it’s determined to have violated screening criteria.
Reverse image search: Google Lens

Tip for Journalists
This tool is particularly useful for tracing the original source of an image and checking if it has been published before but it is now being used in a different context. It allows us to search for an entire image or part of it. It also identifies images with text on them and is capable of translating it and searching for similar results.

What is it?
Google's image search system. It is owned by the homonym company and is free to use.

What is it for?
It compares the image we are analyzing with other images already posted online, in a process known as “reverse image search.” With this tool we can find the same image or images similar to the one we are investigating. It can determine if a photo is old, if it is being spread out of context, or if it has been manipulated. It also provides fact-checking results.

This tool can search from entire images or parts of them, as well as details. If the image contains text, this tool will identify it, translate it and search for it on the web.

How to use it
On your computer or laptop

Go to google.com and click on the camera icon 🕵️ on the right side of the search bar.
Another window will open asking to upload a file or enter the URL of the image we want to find.

* Examples and screenshots shown in this guide may vary according to the user’s geolocation. Screenshots have been included in the same language of the search.
If the image is saved on the computer, we can drag it or upload it by clicking “Upload File” and locating it on the desktop or folder where we have saved it. To get the URL of a photo that is on a website, we have to right click on it and choose "Copy image address."

By uploading the photo or pasting the URL, Google Lens performs a search and shows us the same image in the right pane, as well as similar results.

In May 2023, a photo was posted on X (formerly known as Twitter) showing a bridge full of people with the message: “These invaders will enter our country this week. We are no longer a nation. Prepare accordingly,” followed by a tweet that read, “Reinstate Title 42!” However, a reverse image search using Google Lens confirmed that the image was of a migrant caravan in southern Mexico in October 2018, before Title 42 went into effect in March 2020.

To realize that the image was from 2018, we followed 3 steps:

1. We did a reverse Google image search and found that the photo was circulating in the media in October 2018.

2. We clicked on the DW link, one of the media outlets that published the photo, and saw that it had been taken by the AFP agency in San Pedro Tapanatepec, southern Mexico, as a caravan of migrants continued on its way to the United States.

3. We went to the AFP image gallery and searched for photos of migrant caravans taken in October 2018 near San Pedro Tapanatepec and found the original image, taken on October 27, 2018, by photographer Guillermo Arias.
Bilingual toolkit for journalists covering Latino communities in the U.S.
Tools, examples and recommendations / Reverse image search: Google Lens

Factcheckead: contactó a la autoridad del teletexto y no obtuvo respuesta.
Bernard Kerik, vocero conservador y excomisionado de la Policía de Nueva York, también compartió la foto en Twitter.
“Yo no sabía, pero esa foto había sido publicada en 2018, y temo que sea importante.”

Mexican federal officers abandoned a blockade they had set up on a bridge in the south of the country on Saturday, Mexico’s Human Rights Commission told police that a rural stretch of highway without shade or water was no place to hold talks.

According to organizers, some 5,000 men, women and children are in the caravan, while authorities put the number at 3,630.

The group had turned down an offer by Mexico to help them find shelter and work in the country on Friday night but said they may be willing to discuss the offer again when they reach the Mexican capital. That is a further 100 kilometers (60 miles) to the north.
There are two ways to access image sources:

1. By clicking on the results that appear to the right.
2. By clicking on “Search image source” (which appears above the image we are looking for), a tab will open with a list of image sources that we can click on.

Tip: it is advisable to look beyond the first results.

We can also search directly for an image that we have found online without having to download it and without the URL. In this case, we have to right-click on the image and select the option “Search image with Google.” A window will open on the right side of the browser displaying the same options we have seen so far.
Similarly, in February 2023, a video went viral, allegedly showing a truck carrying an unidentified flying object (UFO) that was shot down off the coast of Alaska on February 10, 2023. It was a fake. The video had been circulating since January 2023 at least (even before the flying object was shot down off the coast of Alaska).

We did a reverse Google search and found an article from a Nevada newspaper called The Record-Courier with a photo of a landscape similar to the one in the video.

We used the address where the photo was taken (Highway 395 south of Gardnerville, Nevada) and looked for it on Google Maps, where we found the same location where the video was taken.

The image on the left is a screenshot of the video. The one on the right is taken from Google Street View. We complemented this search with journalistic reporting, contacted local authorities and wrote this article in Factchequeado.
On your smartphone
The same process can be done with a smartphone: go to the Google search engine in the browser and then click on the camera. If using an iPhone, you will need to download the Google mobile app.
There are two ways to do the reverse image search from a mobile phone:

1. **Save the image** you want to analyze in your Photo Gallery and **upload it to Google Lens**.

2. **Focus** the photo to investigate in Google Lens. To do this, click on the **magnifying glass** where it says “Search” and select (with your fingers) the image or image fragment that you want to examine.

If you want to search for an image found while browsing a website through the Google app (without downloading it), touch and hold the photo for a few seconds until a window appears. Click on “**Search image with Google Lens**” or “**Search image source**”.

Finally, if you search for an image in Google Images using text, and then you want to search one of the photos that appeared in the results, **touch the screen over the image once and click the button that appears over the photo on the bottom left**.
Example 1:

In July 2022, a video of a crocodile carrying a woman in its jaws in a river spread online. Social media and news portals linked the video to a migrant woman crossing the Darien jungle in an attempt to reach the United States. Darien is a region of 575,000 hectares that separates Colombia from Panama and that hundreds of thousands of migrants use in their journey to migrate from Latin America and the Caribbean to the United States.

However, if we take a screenshot and do a reverse image search with Google Lens, we get results about a woman who was doing laundry and was “eaten by a crocodile” in Tamaulipas, Mexico, in 2021.

In other words, it was false that the video showed an incident that occurred with a migrant woman crossing the Darien Jungle, as was said in July 2022.
Example 2:
In this case, we wanted to verify a video posted on Twitter in March 2022 that purported to show Russian President Vladimir Putin declaring peace with Ukraine, when in fact it was a manipulated video.

When searching this example, if we select the text and click on the “Translate” option, we can see that Google Lens detects the language, translates it and gives us the option to copy it, listen to it, go to the Translator tool or search for it in Google.
Reverse Image Search: Yandex Images*

Tip for Journalists

As a search engine of Russian origin, Yandex usually gives good results when searching for images or events related to Russia or the Russian language, like disinformation related to the Russian invasion of Ukraine that began in February 2022. It also works best for topics related to its neighboring countries and in general for Europe, Africa and Asia.

What is it?

It’s the image search system of the Yandex search engine. It belongs to the Russian company of the same name and is free to use.

What is it for?

Yandex performs reverse image searches and compares the image you are researching with others already published online. It can be used to find the same or similar images and to find out if a photo or video is old, out of context or has been manipulated.

Like other search engines, Yandex can search the whole image or parts of it. Like Google Lens, if the image contains text, this tool allows you to identify it, translate it and search for it on the Internet.

As a search engine of Russian origin, Yandex tends to provide good results for images or events related to Russia or the Russian language, like disinformation related to the Russian invasion of Ukraine that began in February 2022.

How to use it

On the computer or laptop

* Examples and screenshots shown in this guide may vary according to the user’s geolocation. Screenshots have been included in the same language of the search.
Go to yandex.com/images and click on the camera icon on the right side of the browser. A window will open with several options. You can upload a saved image on your computer in two ways: by dragging it to the window that opens (“Drag an image here”) or by searching for it in your computer (“Select file”). You can also enter the URL of the image you want to find (“Enter image URL”). To get the URL of a photo that is on a website, right-click on it and click on “Copy image address.”

When uploading the photo or pasting the URL, Yandex performs a search and shows a list of sites that may contain information about the image. It also shows similar images to the one you are looking for on the right side of the page.

For example, in February 2022, a video circulated showing several people throwing stones at a tank with a Ukrainian flag. It was said to be a video from that time showing “the population of Kharkov throwing stones at Ukrainian armored vehicles”. However, after doing a reverse image search with Yandex, many results appear with information about the image and similar images from years before 2022, so we can see that this is a video taken out of context.
One of those results is from a 2014 article from the Russian national television network TV Center. In the article, there is a video from 2014 with the same images from the viral video circulating in 2022. Moreover, it places them in the city of Mariupol, and not Kharkiv. In that year, there were clashes between the Ukrainian army and pro-Russian groups in that city, as Factchequeado points out in its article about this piece of disinformation.

On a smartphone

The same reverse search process can be done from a smartphone in two ways:

1. Access to Yandex through any search engine. In this case, selecting the camera icon will display several options: “Photo library”, to select a photo saved in your image gallery, and “Take photo”, to take a photo of the image you want to study. In the latter, after taking the photo, select “Use photo” for Yandex to perform the search.
2. Download the Yandex application for Android or iOS. In this case, it is also possible to perform the search by focusing the camera on the image, or by selecting a photo saved in the image gallery of your mobile phone.

In both cases, Yandex does the search and offers similar images to the one you are looking for and a list of web pages that may contain information about the image.

Also from the phone, if the image contains text, Yandex identifies it, translates it and searches the terms online. If this is done from the app, Yandex directly translates the text, and you can see it translated on the screen of your cell phone.
Example:

In August 2023, a video went viral on social media showing people in a bar in front of a giant screen purportedly broadcasting the news that Trump was leaving GA [Georgia] after having his mugshot taken and being booked on felony charges as the crowd celebrated.

However, after doing a reverse search for one of the video frames with Yandex, we get several results of similar videos, in which the images of Donald Trump on the giant screen are changed for other images.
Some of these videos were posted before August 2023, like November 2019, as we can see from the screenshot below.

A review of the videos shows that this is a meme that has been used for years, in which the original images on the giant screen are replaced with the ones to be included in the meme. Therefore, **it is false that this is a reaction to a video about Trump’s 2023 mugshot**.

A Google search using the terms “meme crowd reaction pub” brings up a [2016 video](#) that states to be the screening of the Euro 2016 final between Wales and England at a venue in Ashton Gate Stadium (Bristol). There is also an article from the [Bristol Post](#) explaining the history of the venue where the original video was recorded.
Reverse image search: Bing Visual Search*

Tip for Journalists

It works very similarly to Google's reverse image search (Google Lens), but although it often shows fewer results, sometimes it's worth considering using it to do the same search with different tools.

What is it?

It’s Bing’s image search system, Microsoft’s search engine.

What is it for?

Bing allows for reverse image searches, comparing the image we’re investigating with others already posted online. It can be useful for locating the same image or similar images and determining if a photo is old, out of context, or has been manipulated.

Similar to Google Lens, it can search using the entire image or specific parts and details. However, it lacks Google’s option to identify and translate text in images.

How to use it

On the computer or laptop

Access bing.com and click on the camera icon located on the right side of the search bar 📷. Then, you’ll have the following options to select the photo to verify: choose an image downloaded on our computer, paste the URL of an image, or take a photo and search it. This last option is something that Google doesn’t allow in its desktop version of image search.

* Examples and screenshots shown in this guide may vary according to the user’s geolocation. Screenshots have been included in the same language of the search.
When uploading the photo or pasting the URL, Bing conducts a search and displays **identical and similar images** in the **section on the right**.

If you click on “Visual search,” the tool will allow you to focus on a specific part of the image to search for a detail you’re interested in. In this case, focus on the flag in the image to see if you get similar results.
Now, on the right, you can see all the images related to the selected fragment of the image. In this case, the selected detail is the Confederate flag. Thus, Bing is a very useful tool for searching for symbols that may appear in an image.

On a smartphone
The same reverse image search process can be done from a smartphone in two ways:

1. Accessing Bing through any browser.
2. Downloading the Bing app for Android OR iOS.

In both cases, the reverse search can be done in two ways:

1. By saving the image to investigate in your photo gallery and uploading it from there to Bing. To do this, click on the camera icon that appears on the right within the search bar first. When the camera opens; click on the photo album icon, access your image gallery, and select the one you want to verify.

2. By focusing on the image to verify from the cell phone (through the browser or the app). To do this, click on the camera icon in the search bar first. When the camera opens, click on the magnifying glass icon and frame the image you want to search.
Bilingual toolkit for journalists covering Latino communities in the U.S.
Tools, examples and recommendations / Reverse image search: Bing Visual Search

In both cases, when searching, Bing will show you similar or identical images to the one we are searching for.

Example:
On social media, a series of photos is being shared showing a wounded girl being carried in the arms of three different men, and it's being linked to the conflicts between Hamas and Israel from 2023. This image has also circulated in other countries indicating that the same girl appears in ‘three chemical attacks.’ However, this information is false.

To prove it, we'll use Bing’s reverse image search. First, we’ll copy the URL of the image we want to verify by left clicking and selecting “Copy image address.”

Then, we go to https://www.bing.com/visualsearch and paste the URL where it says, “Paste image or URL”
In the first tab, labeled ‘All,’ we can see all the results that the search engine provides where the same image or similar images appear:

If we click on “Pages with this image,” we’ll find five pages where this image has been posted before:

If we click on the first link, which redirects to the Secolo D’Italia website, we can see that this image had been already published on that site on May 28, 2019, to illustrate an article titled ‘ISIS, two more Frenchmen sentenced to death. In Syria, Islamists let their human shields die.’ We can then confirm that the photo existed several years before the conflict between Hamas and Israel that began on October 7, 2023, following the Hamas terrorist attack.
Bilingual toolkit for journalists covering Latino communities in the U.S.
Tools, examples and recommendations / Reverse image search: Bing Visual Search

If we click on “Related content,” we’ll find more results.
If we scroll down, we'll find an AFP article that denies the news that the girl in the image is part of a staged scene or a survivor of successive attacks.

Read more about this case in this article published on Factchequeado: https://factchequeado.com/verificaciones/20231024/fotos-no-muestran-nina-bombardeada-en-3-sitios-y-fechas-distintas-fue-siria-2016/
Video Search: InVID*

**Tip for Journalists**

This tool quickly checks if images in a video appear in other videos, if a video is old, and information such as from what country a video was uploaded, among other things.

**What is it?**

It is a free extension for video verification.

**What is it for?**

It allows us to search if images appearing in a video also appear in other, previously published videos. This can be done across various search engines. It can be useful for locating the same video or similar videos and for determining if a video is old, out of context, or manipulated. Additionally, InVID provides access to the video's metadata, such as the country in which it was uploaded, if that information is available. This is especially useful when the original video is available, as in many cases, this information is missing from the different versions circulating on social media.

**How to use it:**

**On a computer or laptop**

For Chrome, click [here](#) to download
For Firefox, click [here](#) and download it manually.

When coming across a video to analyze, click on the extension that leads to the tool, which allows for various actions.

*Examples and screenshots shown in this guide may vary according to the user's geolocation. Screenshots have been included in the same language of the search.*
One of them is video analysis, where you can enter the video’s link or upload one from your computer. Then, the extension will select a few frames or image captures from the video for analysis. These captures can be searched on different search engines to see if other videos with these same images have already been posted. Searches can be conducted on Google, Yandex (a Russian search engine), TinEye (a Canadian-based image specialized search engine), and Baidu Images (a China-based search engine), for example. These options show more global images.

By pasting the video’s URL into the InVID extension, for instance, we might find the same video published on earlier dates or times or in different contexts, which can be a clue that it’s disinformation.

**Example 1:**

Let’s say we want to verify a video that was spread on X (formerly Twitter) on February 4, 2023, in which it is claimed that people are supposedly singing ‘and it will fall, this government will fall’ to Nicolas Maduro at a baseball game.

With the tool installed, we rely on the video, right-click, and copy the link. Then, we open InVID (the icon is located at the top, on the right-hand margin), click on **Keyframes**, and paste the link.
Bilingual toolkit for journalists covering Latino communities in the U.S.
Tools, examples and recommendations / Video Search: InVID
The tool will return some keyframes. Let’s rely on the first picture and click on FakeNews Debunker, and then on Google Lens.

Then, the Google Lens window will open, and similar images will appear.

This way, we can access various links. In this case, for example, it allowed us to realize that the audio in the video had been manipulated when compared to another video published the previous day by a journalist from the official Venezuelan TV channel (Venezolana de Televisión, VTV), in which people can be heard chanting ‘Nicolás, Nicolás,’ as explained in this article published by Factchequeado.
Example 2:
In December 2022, we came across a video circulating on social media, claiming to show a Walmart in Buffalo that was looted during the 2022 snowstorm. To verify it, we first used InVID to analyze the key frames of the video.

Then we took one of those keyframes and uploaded it to Google Lens to search for the original source of the image or similar images. There, we found a link to a YouTube video published on October 28, 2020 (i.e., 2 years earlier) that had been recorded in a Walmart in Philadelphia, not Buffalo as claimed on social media.
When we opened the video, we noticed it was published on October 28, 2020, by an independent journalist named Brendan Gutenschwager. The description of Gutenschwager’s video stated that it was recorded at the Walmart Supercenter in the Port Richmond neighborhood of Philadelphia.

At the 1:44-minute mark of the video, we came across the same image that appeared at the end of the viral Twitter video. We can see boxes of the same brand arranged in the same way, along with the same advertisements showing the same prices.

Comparison between the viral X video (formerly Twitter) claiming to be from Buffalo in December 2022 and the 2020 video recorded in Philadelphia.

So, we were able to use InVID to verify that the video was out of context, as it was not new but had been published two years earlier, and it was from a different location than what was attributed on social media.
Reverse image search: FotoForensics

Tip for Journalists
This is a very useful tool to check if an image has been manipulated.

What is it?
It is a tool developed by Hacker Factor to analyze digital images. There is a free version for analyzing images in JPEG and PNG format and a paid version that includes more features.

What is it for?
It analyzes digital images and displays the areas where they may have been altered. It can be used to find out if an image has been manipulated or not. It is important to have some prior knowledge of photography, or practice, because the tool does not indicate directly whether the image has been manipulated or not, but it does provide information (such as whether there are irregularities) so that users can find out by themselves.

How to use it
No registration is required: log on to https://fotoforensics.com from a computer or smartphone and upload the file, which must be JPEG, PNG or WebP, or the URL of the image.

* Examples and screenshots shown in this guide may vary according to the user’s geolocation. Screenshots have been included in the same language of the search.
By clicking on ELA (Error Level Analysis), the function detects whether the content of the image has been modified.

Some specific knowledge of image editing is necessary to interpret the results correctly, so it is useful to read this tutorial on common mistakes before using this tool.
Example:
In February 2023 we found on TikTok a video with the message “Alaska UFO footage”, where an alleged flying object was observed coming out of a cloud. The user said in the video that he had received the first images of the incident, which occurred the day before, February 10, “before the Air Force” did.

We first did a reverse image search and found the same video on YouTube posted in 2018. However, in this video, the sighting of the alleged craft was said to have occurred in Turkey.

We then took a screenshot of the video and analyzed it with FotoForensics. According to the results, the image of the alleged spacecraft was added in the editing.

Thus, we were able to conclude that the video on TikTok was a fake.
Online content archiving: Wayback Machine*

Tip for Journalists

This tool archives web pages to preserve their content and return to them if deleted. It also allows us to identify any subsequent edits it may have undergone. When we archive misinforming content, it allows us to use the archived link in the article we are going to publish and prevent the misinforming content from continuing to generate traffic (clicks).

What is it?

Wayback Machine is a free service from the Internet Archive digital library for archiving the exact state of a web page at a given point in time.

What is it for?

The Internet changes. Websites evolve, are edited, change or disappear. Wayback Machine makes it possible to archive and later retrieve the exact appearance of a web page at a specific point in time. The system currently stores more than 858,000,000,000,000 web page versions. This allows us to prove that a website (or press or social media post, any URL) had a certain piece of content at a certain time, and thus document its status in case the content changes or is deleted.

How to use it

Wayback Machine works the same on a computer or a smartphone, since it works through an internet browser.

Enter https://web.archive.org/

* Examples and screenshots shown in this guide may vary according to the user’s geolocation. Screenshots have been included in the same language of the search.
There we can either check if a web page has already been archived or archive a web page.

**Check if a web page has already been archived**

By typing a URL in the search box, you can see if a site has already been archived (Wayback Machine works in two ways: an algorithm scans the web and decides what and when to archive, and any user can submit a site to the archive at any time).

When typing a URL, if the system has already saved it, Wayback Machine will display a calendar with all the dates and times when a copy has been saved.

For example, let’s try: [https://www.whitehouse.gov/administration/](https://www.whitehouse.gov/administration/).
In October 2023, the website looked like this:

![The Biden-Harris Administration](https://www.whitehouse.gov/administration/)

Thousands of people work in the West Wing, the East Wing, the Cabinet, and the Executive Office of the President. Learn more about the people who carry out the priorities of the Biden-Harris Administration.

When we type the URL into the search engine, Wayback Machine shows a calendar with the dates this piece of content was archived:

![Wayback Machine Calendar](https://www.archive.org/download/https://www.whitehouse.gov/administration/)

Saved 9,563 times between January 22, 2009 and October 30, 2023.
Bilingual toolkit for journalists covering Latino communities in the U.S.
Tools, examples and recommendations / Online content archiving: Wayback Machine

There, you can check any date and time the site has archived the website:

By clicking on the time, Wayback Machine shows the status of the page at that exact moment. In this case, March 18, 2019, at 3:40PM.

This was the exact URL status of https://www.whitehouse.gov/administration/ on March 18, 2019, at 3:40PM.
Bilingual toolkit for journalists covering Latino communities in the U.S.
Tools, examples and recommendations / Online content archiving: Wayback Machine

This also works with pages that have been deleted and return a 404 error when viewed, if they were previously archived.

This allows us to show the status of a website -or news or social media post- at a given time, even if it has been edited or deleted.

**Archiving a website**

In case you want to archive a URL, which is a highly recommended practice that we journalists should do with every URL or anything strange that catches our attention, like a controversial tweet from a politician, copy the URL into the “Save Page Now” field.

Type the URL of the page to archive, click SAVE PAGE, and then click SAVE PAGE again.

NOTE: If you create an account in the Internet Archive, you will be able to find this page stored in your personal archive. However, if you do not open an account, the website will still be stored, and in either case it will be accessible to everyone.

Let’s take a look at the saving process:

Once saved, the web will show us a “Done!” icon.
From now on everyone will be able to check the status of that URL right at the moment you saved it. In this case, October 31, 2023, at 09:08:27AM PST.

NOTE: Wayback Machine only works on sites that allow indexing. Very important: if the rights holder of the captured site complains to the Internet Archive, they can delete the capture, so it is not recommended to use it to archive content that may be discussed in legal proceedings or is highly relevant. Due to their complexity and/or programming, some web pages will not be saved completely (e.g. videos). Similarly, Wayback Machine has a Chrome extension to save web pages in an easier way.


Example:
A piece of content claiming the US would send $8 billion to Israel went viral. It is supposed to be a screenshot of a memo dated October 7, 2023.
The amount and destination of the aid can be read in the screenshot.

To verify the accuracy of the document and/or determine if it has been deleted, we searched the publications section of the White House website and found nothing about it. There is not any trace of this alleged announcement of aid to Israel or public statements about it either.

Also, there isn’t any evidence that the alleged document was subsequently posted and deleted. It does not appear in any of the 29 screenshots of this site taken with Wayback Machine between October 7 and 8.

By searching the BRIEFING ROOM of the White House website, we realized that both the title of the memo and the rest of the text are identical to those of another press release from July 25, 2023, in which Biden announced $400 million in aid to Ukraine. The only things that changed are the name of the country and the amount of the alleged aid.

It was false that this document in which Biden announced $8 billion worth of aid to Israel had been posted on the White House website. You can read the article at Factchequeado.
Online Content Archiving: Archive.Today*

Tip for Journalists
This tool archives web pages to preserve their content and return to them if deleted. It also allows us to identify any subsequent edits it may have undergone. When we archive misinforming content, it allows us to use the archived link in the article we are going to publish and prevent the misinforming content from continuing to generate traffic (clicks).

What is it?
El is a free service to archive the exact status of a web page at a given time. It is available in different extensions like [https://archive.is/](https://archive.is/), [https://archive.li](https://archive.li), [https://archive.today/](https://archive.today/) or [https://archive.ph/](https://archive.ph/). There is a similar tool called Ghost Archive, that works in the same way.

What is it for?
The Internet is changing. Websites evolve, are edited, change or disappear. Archive.Today allows us to archive and later revisit the exact appearance of a website at a given time. Thus, we can prove that a website (or a press or social media post, i.e. any URL) had a certain content at a certain time and document its status in case the content changes or is deleted.

How to use it
It works the same way on a computer or a smartphone. Archive.Today works through a web browser.

Type [https://archive.today/](https://archive.today/) (or any other URL that redirects to this one).

* Examples and screenshots shown in this guide may vary according to the user’s geolocation. Screenshots have been included in the same language of the search.
In Archive Today we can either **check if a web page has already been archived** or **archive a website**.

### Archiving a website

In case you want to archive a URL, which is a highly recommended practice that we fact-checkers should do with every URL or anything strange that catches our attention, like a controversial tweet from a politician, copy the URL into the “My URL is alive and I want to archive its content” field.

Type the URL of the page to archive and click “Save”.

Archive.Today allows you to capture web pages up to 50MB in size. Because it is manual, this service does not respect robots.txt files and will capture whatever you send it. It also has a **Chrome extension** to save web pages in an easier way.
Checking if a web page has already been archived
By entering a URL in the search field, we can check if a web page has already been archived by another user. Archive.is only stores pages submitted by users.

The system will show the screenshots it has if it already has on file the URL you entered.
Let’s try, for example, https://www.nytimes.com/. If we enter that URL in the search engine, Archive.Today shows us a calendar of the times it has archived that content:

In this case, we see that Archive Today has already archived this URL a total of 361 times between September 5, 2015, and the one we just did, which is the latest.

And by clicking “361 MORE” we can see all the files the system has stored.
By clicking on a snapshot, Archive.Today will show the status of the website at that precise moment. In this case, September 11, 2017, at 07:09.

This way we can show a website (or news or publication in social media) at a given time even if it has been edited or deleted.
Example 1:
In this case, we want to archive a piece of content in case it is deleted or it disappears, and also so as not to amplify the reach (clicks) of a misinformation when we publish it in our article. A well-known TIK TOK disinfomer announces the following in a video with over 700,000 views:

“Yesterday, Hamas group leaders called on their extremist groups to take action...and as you can see here at the Atlanta airport, a female extremist stabbed 3 people, including a police officer. A female extremist, they say, taking justice into her own hands” (sic).

Here is the Tik Tok (as of October 31, 2023) and in case it is deleted, here is the downloaded video.

Given the report of an alleged case of Islamist terrorism in the United States, we checked the information and were able to determine that there was indeed a stabbing at the airport in question, but that it had nothing to do with Hamas and there was no terrorism charge.

In order to publish a denial, we need to document the content of that Tik Tok. We can do this with Archive.Today by saving a screenshot of the Tik Tok that we can link to the video we downloaded, thus proving its contents if we are asked to do so.

Read more about this case: https://factchequeado.com/verificaciones/20231020/no-hay-pruebas-apunalamiento-aeropuerto-atlanta-hamas/
Example 2:
New York Representative-elect George Santos (Republican Party) claimed during his campaign that he had graduated from Baruch College in New York and had worked for Citigroup and Goldman Sachs. However, these facts were false. Following an investigation by The New York Times, which claimed that Santos had lied on his resume as a candidate, the representative-elect admitted his lie.

Now let’s see how we can use Archive.Today to prove that Santos posted false information on the resume posted on his campaign website. To do this, we’ll check to see if the website Santos used during his campaign (https://www.devoldersantosforcongress.com/about-us) is already registered in Archive.Today.

The site shows us that the most recent archive for that web page was on December 18, 2019.

By clicking on the latest screenshot, we can see that on that date, the candidate did indeed claim on his resume to have graduated from Baruch College and to have worked at Citigroup and Goldman Sachs, information that he later admitted was false.
Bilingual toolkit for journalists covering Latino communities in the U.S.
Tools, examples and recommendations / Online Content Archiving: Archive.Today

You can read more about this case in this article published by Factcheckado:

Back to the Tools map
Online content archiving: Perma.cc*

Tip for Journalists

This tool allows you to create links that do not break, in order to preserve a piece of content even if its URL changes or the web page is updated. This way, all the links we include in our articles will not break if the original source changes its content. It is a paid service, although it allows you to create 10 free links. Unlike Wayback Machine and Archive Today, Perma.cc is designed more for storing links than for searching archived content.

What is it?

It is a service of the Harvard Law School Library to create links that will not break and will always work, even if the content changes URL or is deleted from where it was at the time of the search. Perma.cc is a paid service that only allows you to create ten links for free (with exceptions for academic libraries and courts).

It is designed to preserve citations from the academic community in papers and other publications. It works similarly to The Wayback Machine or Archive.Today, since Perma.cc creates and archives a copy of the piece of content. However, Perma.cc is intended for using the link created with the archive of a piece of content, rather than for searching for other content archived by third parties.

What is it for?

The Internet changes. Websites evolve, are edited, change or disappear. Perma.cc makes it possible to archive and retrieve the exact appearance of a website at a specific point in time. This allows us to show that a website (or press or social media publication, any URL) had a certain content at a certain point in time, and thus document its status in case the content changes or is deleted. Perma.cc was originally designed to archive and preserve the exact content of citations in academic papers at the time they were consulted.

* Examples and screenshots shown in this guide may vary according to the user’s geolocation. Screenshots have been included in the same language of the search.
How to use it
Perma.cc works in the same way on a computer or smartphone, since it works through a browser.

Type https://perma.cc

Here we can Archive a web page.

Archiving a web page
In case we want to archive a URL, which is a highly recommended practice that we journalists should do with every URL or anything strange that catches our attention, like a controversial tweet from a politician, we need to copy the URL into the “Paste your URL here” field.
Bilingual toolkit for journalists covering Latino communities in the U.S.
Tools, examples and recommendations / Online content archiving: Perma.cc

Enter the URL of the page you want to archive. In this case, we will use a web page with content that changes frequently, and we want to credit the exact appearance it has today: the list of the ten most wanted people by the FBI. It is located at the following URL: https://www.fbi.gov/wanted/topten

By clicking the “Create Perma link” button, the service archives the status of that page at this exact moment in time, October 31, 2023, at 12:39 PM ET.
Bilingual toolkit for journalists covering Latino communities in the U.S.
Tools, examples and recommendations / Online content archiving: Perma.cc

It also gives us a link where we will always find this screenshot: https://perma.cc/28SS-F3YL

NOTE: Perma.cc has a Chrome extension to save websites in a simpler way.

**Example 1:**
We found a post on X that contains false information that could affect people’s health. Specifically, this tweet says: “Vitamin K injections contain a mixture of chemicals.”

![Tweet example](image)

This is a serious issue, and in order to work on it, it is imperative that we prove (in a court of law, in the worst case) that this person actually wrote this exact message at this exact time.

To document the content of the tweet, we send it to Perma.cc to save a copy and certify the content. Perma.cc provides us with this link: https://perma.cc/4MLB-C3PY and will save the original content in case there is any dispute.
In Perma.cc, we can see a reproduction of the tweet, as well as the date and time it was captured, in this case October 17, 2023, at 10:41 PM ET, confirming the existence and status of the tweet at that time.

More information on this case at:

Example 2:
We can use the same example at the beginning of this chapter. Suppose we are reporting on a person who is currently on the FBI’s 10 most wanted list, in this case, Arnoldo Jimenez, and we are going to publish our story now.

If someone checks, the official URL today, https://www.fbi.gov/wanted/topten, will show him there. But if we publish the article today and it is consulted by someone a month or a year from now (when the most wanted list will have already changed), Mr. Jiménez will not appear in it and the link will be useless.

If we use the Perma.cc link we created (https://perma.cc/28SS-F3YL) instead of the original one, regardless of when someone checks, the information will be displayed as it was on the date it was archived and will contain the profile of the person we reported.

As an example, in this other Perma.cc link https://perma.cc/T8U2-994F we can check the status of the same URL but dated May 1, 2015, and of course it shows different people.
Advanced Search in X (former Twitter)*

Tip for Journalists

This tool allows you to find exact phrases more quickly, as well as dates when a tweet was published and interactions it received; and most importantly, it is useful to find out if someone really published a tweet that spreads in social media as if it were their own.

What is it?

Advanced Search is X’s tool for searching for content on this social media platform in an efficient way.

What is it for?

Use it to search for a tweet or post you have seen before, to find out what was published on specific dates, or to check if a particular profile has posted a tweet that is being shared on social media as if it were their own.

How to use it

Nowadays, to verify alleged posts in X, we can use its search engine, where we can type in the words we are interested in and it will give us as a result the tweets or biographies that contain those words and the accounts with the name or handle (the name that comes after the at) that we have written.

* Examples and screenshots shown in this guide may vary according to the user’s geolocation. Screenshots have been included in the same language of the search.
For example, if we try to search for the words “Visa USA,” we can filter the results by recent posts, people who use those words in their profile names, related audio and video content, or lists that include those words in their names.

In addition to this search engine, we can access the advanced search through this link or by entering twitter.com and typing a term in the search bar. When the results appear, there will also be a search filter option. There is the link to the advanced search.
In advanced search, we can check all the filters to classify our search (below we offer a step-by-step description of each of them, and there is a more detailed description in its help center). For example, when searching by words, there are several options, such as searching by an exact phrase, any of the written terms or discarding that any of them appear. We can also search by hashtags or by different languages.

In its Spanish searches, X does not take into account accents, so it does not matter if the word has accents or not, as it will show the results in either of the two forms.

Another option is to filter by accounts. We can select posts published by one or more accounts, profiles replied to in those tweets, or accounts mentioned in the messages. We can also set filters so that the results include replies to other tweets (and not just original posts), or links.
Selecting the **minimum** and **maximum** number of interactions of the tweets we are looking for is another possible option. We can select the minimum number of replies, likes and retweets of the messages we want to find. This allows us to check how viral a piece of content is.

Finally, Twitter gives the option to narrow down the results to a **specific date range**.

In summary, these options filter the messages we want to find and refine our search.
It is important to note that once we have done our search and have the results, we can use the options bar, which includes Featured, Recent, People, Photos and Videos, and Lists.

For example, if we want to search for comments on the artificial intelligence experiment that managed to “rescue” John Lennon’s voice, we can first filter for publications containing “artificial intelligence + Lennon” and then select the most recent ones in the options bar.
**Bilingual toolkit for journalists covering Latino communities in the U.S.**

Tools, examples and recommendation / Advanced Search in X (former Twitter)

---

"Now and Then" is being rightfully celebrated as the last Beatles song. But it's also put artificial intelligence in the news this week because of A.I.'s amazing technical restoration of John Lennon's voice.

WhatIfBeatles.com

Suppose, Inn...
Mostrar más

YES. I'd be so curious. 53.8%
NO. It's not them period. 46.2%

156 votes - Resultados finales

The Beatles makes history with 'Now And Then,' which features the voice of late member John Lennon and was developed using artificial intelligence.
X Search Operators

X's Advanced Search is available on its website, but not in the mobile app. On the phone, filter using the aforementioned search bar (Featured, Recent, People or Photos) and choose between people you follow or not, and location (publications posted from anywhere or written by people who are geographically close).

However, to use the mobile application to check content, there are a number of commands, such as those in Google Advanced Search, that also work in X, and that work in both the online and mobile versions. These are some of them:

### " " (quotation marks)

Displays results with the exact phrase typed between the quotation marks.

### from:

This formula, followed by the handle of an account (written without the @) and a text, will show the tweets from that account that contain the text. For example: from:Factchequeado visa
It is used in the same way as the “from” option and shows the tweets that have been written in response to messages from the account we indicate. For example: to:factchequeado disinformation
These commands allow us to select the tweets published in date ranges. “Since” marks the “since when” we want the tweets to appear and “until” marks the “until when”: “disinformation in USA” since:2020-05-16 until:2022-01-31.

This example shows tweets published between May 16, 2020, and January 31, 2022. These operators can be used separately or at the same time.

Written between two words and in capital letters, it looks for one of the terms in the search, which can be more than two. For example, with this search (phishing OR scam OR fraud), the results will include any of these three words.
Bilingual toolkit for journalists covering Latino communities in the U.S.
Tools, examples and recommendation / Advanced Search in X (former Twitter)

- (hyphen)

It excludes the word immediately after it, without a space. It can also be used in front of a phrase in quotation marks to exclude it from the results, as in these examples:

Donald Trump investigation -fakenews
Investigation on Donald Trump - “its fakenews”.

URL of a tweet

Displays the tweets that have been published quoting the URL of the message we have searched for. These are what we know as “quoted tweets.”

For example, if we want to search for all posts quoting this post by Joe Biden, we can paste its URL directly into the search engine.

# (hashtag)

It shows tweets that include the specified hashtag.

min_retweets: / -min_retweets:

They limit the minimum and maximum number of retweets of the messages we want to search for. If we add min_retweets:1000 to our search, only messages that have been retweeted at least 1,000 times will appear. On the other hand, if we enter -min_retweets:1000, the maximum number of retweets these
messages will have is 1,000.

For it to work, the numbers must be written without punctuation. That is, 1000 and not 1,000.

**min_faves: / -min_faves:**

They work the same as the previous commands, but with the number of “likes”.

**min_replies: / -min_replies:**

In this case, they specify the minimum and maximum number of replies received for the tweets we are looking for.

**near: / within:**

They geo-locate the places from which tweets are sent. When using “near:” we can enter the name of a city (allowing names with spaces, such as “The Hague”) or “me” if we have enabled our location to ensure that the tweets we see have been published from a location near us. “Within:” is used to mark a distance radius around the selected location. We can enter it in kilometers or miles. For example: unemployment near: Florida within:10mi

**geocode:**

Another geolocation command, in this case used to specify coordinates instead of a city name. The coordinates are separated by commas, not spaces, and the radius in kilometers or miles is added at the end of the command. In this example, using the coordinates of Kelowna, Canada, we can search for publications about fires that occurred in 2023:

fire geocode:49.863613,-119.564461,100km
Here we can do the same search, but in miles:
This search also works if we do not enter any text and just search by coordinates. In this case, all tweets published from that location and from accounts that have specified their location will be shown.

These commands can be very useful to refine the results and find the posts we are looking for, and can be combined with each other. In this [link](#) we can see more search operators for Twitter that can be useful at some point.

**Example:**

![Image of a tweet by Alexandria Ocasio-Cortez](image)

The tool is useful when we need to verify whether an alleged post on X is real. In this example, a piece of content from New York Congresswoman Alexandria Ocasio-Cortez (Democratic Party) was circulating.

The tweet was allegedly posted on August 30, 2019, as Hurricane Dorian, a Category 3 hurricane, was about to hit the southern state. In the screenshot of the post, the Democratic congresswoman allegedly criticizes people pumping gas.

The first thing to do is an advanced search, filtering by account and date. If we did not use the advanced search, we would waste a lot of time checking all of the Congresswoman's publications until this specific date.
We checked, and the post does not appear in the history of Ocasio-Cortez's Twitter account. However, the congresswoman may have decided to delete the tweet. To confirm, we can search the words “electric cars, hurricane and gas” related to Ocasio-Cortez. If we look at the results, we can see that, once again, there are NO real retweets: only the shared image of the alleged tweet appears.

The fake tweet had been shared more than 500,000 times, so it would be impossible not to find a retweet with this search. It is important to add that to complete the verification, it would be necessary to confirm that the alleged post is not stored in an archiving tool such as WebArchive or, for this specific tweet, in the database of deleted tweets created by ProPublica, an investigative journalism media outlet. In this case, both searches are negative. Therefore, we can confirm that this is a false publication.
Bilingual toolkit for journalists covering Latino communities in the U.S.
Tools, examples and recommendation / Advanced Search in X (former Twitter)

You can read Factchequeado's complete debunk [here](#).
To detect AI: Hive Moderation*

Tip for Journalists

Although it is not 100% infallible –none of these tools for detecting Artificial Intelligence (AI) creations are–, this tool estimates the probability that the image we are evaluating was created by AI, and tells us what platform it was created on.

What is it?

Hive Moderation is an extension for Google Chrome that recognizes images and text created with artificial intelligence. It is an open and free tool, although it has a more complete paid version.

What is it for?

While not 100% infallible, Hive Moderation analyzes the likelihood that an image was created using artificial intelligence. It detects images generated by platforms that use AI, such as Midjourney, DALL-e, or Stable Diffusion.

How to use it

We can use it directly on the website or we can download the extension. Once downloaded, the icon will appear in the top right corner.

If we have not downloaded the extension, once we enter the site, we can upload the image we want to check. In this case (the image of Pope Francis in a white jacket), for example, Hive Moderation says that there is a 99.9% probability that the image was created with AI, and specifically with Midjourney.

* The examples provided in this guide and the screenshots it presents may vary according to each user’s geolocation. The screenshots have been included in the original language in which the search was conducted.
If we have downloaded the extension, we can right click on any image we find on the web, or on social media, and click again on “Hive AI Detector”.

Again, we see that the tool estimates a 100% probability that the image was generated by AI, especially with Midjourney.
Bilingual toolkit for journalists covering Latino communities in the U.S.
Tools, examples and recommendations / To detect AI: Hive Moderation

Example:
In May 2023, an image of former US President Donald Trump circulated on Twitter, showing him in an African American community, holding a drink. Details such as disproportionate faces, deformed hands, and blurred text gave clues: the image could have been created by AI. In addition, the Hive Moderation tool also estimated that the image was not real and was generated by AI. Factcheckeado explains how the image was created in this article.
It is important to note that none of the automatic AI detection tools are 100% effective and that detailed observation (of the image, of the hashtags), analysis of the source, critical evaluation of the context and verification of the facts with official and alternative sources, among other practices of the journalistic profession, will allow us to analyze the content. This article published in the Reynolds Journalism Institute (RJI) explains how to do it and other tools we can use to find out if an image was created with AI.
Maps and geolocation: Google Earth*

Tip for Journalists

Google Earth is one of the most comprehensive mapping and orthophotography systems in the world. You can locate and even see 360-degree view corners, sites, and key locations for your research. Without traveling, you can verify locations in photos and videos, or stop at an exact location by entering an address. You can measure distances, plan routes, and even overlay layers with different types of information.

What is it?

Google Earth is Google’s mapping and orthophoto service. Available for free on the web and through its apps, it offers one of the most comprehensive, complete and up-to-date cartographies in the world.

What is it for?

It allows us to locate in a specific place certain events collected or shown in stories, photos and videos. It also allows us to obtain distances between one place and another and obtain an image of a specific place.

Google Earth allows us to visualize the entire world (with some exceptions, such as military bases or other sensitive areas) in a variety of ways: through orthophotos (digitized photographic representations of a terrain), 3D visualizations, or maps in which we can also overlay a variety of layers with different information.

* Examples and screenshots shown in this guide may vary according to the user’s geolocation. Screenshots have been included in the same language of the search.
Google Earth also allows us to show, hide, or even program different data layers to overlay on the maps. We can also plan a route, measure distances, export a video and get an image, among other options.
How to use it

Google Earth works from a web browser at https://earth.google.com/web/, but to take advantage of all the options, it is best to download the free app.

The system allows easy navigation around the globe by viewing orthophotos or maps of virtually the entire world. To view a specific location, you can perform a search, move the globe with the mouse, or click on a link.

Google Earth also interprets geographic coordinate systems. Remember that photos taken with a smartphone may contain a GPS location tag in their metadata, which allows you to locate where the photo was taken.
Bilingual toolkit for journalists covering Latino communities in the U.S.
Tools, examples and recommendations / Maps and geolocation: Google Earth

With Google Earth, you can export images, catalog spaces, create routes or link points, and even create specific visualizations by overlaying data layers created to show what an exact location looks like.

Another interesting feature of Google Earth is that it archives old orthophotos, so you can see how a particular place has changed over time. Here we have an orthophoto from 2020 and another one from 2023 of the same location. We can see that a new house has been built in the middle of the photo:

Other tools to consider:
There are several mapping systems to use depending on the region or circumstances. There’s maps on Bing, Apple or Yandex, which may be more detailed than Google in certain areas.

There’s also a variety of tools to make your job easier.

There is a Chrome extension called Map Switcher that allows you to switch to another map system with a simple click, saving you a lot of time.
Another example of an application that can help you a lot is Dual Maps, although it is not a map in itself. This tool shows all three main visualizations of Google Maps at the same time.
Example:
Let’s say we receive from a source this photo of the island of Manhattan, taken from New Jersey, in which we see something relevant to an investigation. Suppose the date it was taken is also very important to the investigation. The source tells us that the photo was taken in January 2002.

View of Manhattan from New Jersey.

We are surprised because we know that the attacks that destroyed the Twin Towers in this photo took place in September 2001 (before the alleged date of the photo). How can we prove it, and thereby prove that the narrative accompanying the photo we have received is false?

We are going to use Google Earth, which allows us to visualize orthophotos of a place on Earth taken at different times. Let’s go to Manhattan with Google Earth, which shows us the most recent photo taken on June 20, 2022.
In this case, what we see are not the Twin Towers, but the new building that was built next to where they used to be. The Twin Towers were located in the two square pools that can be seen in the photo (marked in red). Now, how can we show the state of this part of the city in January 2002?

Among all Google Earth tools, there is one that allows us to view all of the photos that were taken of the same location on different dates:

By clicking on the clock icon, we get a timeline in which we can navigate. Google Earth will show us the different photos it has of the site taken on different dates.
Clicking on the blue areas will display the corresponding photo. With this tool we will show the state of this part of Manhattan in January 2002.

We can see the state of the towers in April 1997.
Bilingual toolkit for journalists covering Latino communities in the U.S.
Tools, examples and recommendations / Maps and geolocation: Google Earth

The next photo saved by Google is from September 12, 2001, one day after the attacks. As we can see, the towers are gone.

There is another photo from December 2001 that clearly shows how the buildings are no longer there.
If we go to the next photo, June 2002, we see that the towers were not rebuilt.

This is how we can prove that the photo said to be taken in January 2002 is false; i.e., it was not taken on that date.
Google Trends*

Tip for journalists

Use Google Trends to see the search volume of a term or topic to monitor user interest and trends. This tool also allows you to identify misinformation that could get spread and affect Latino communities. On the maps provided by the search, you can see in which states the search for a certain word is increasing.

What is it?

It is a free tool to track the evolution of searches for a given keyword or topic over time.

What is it for?

It can be used to monitor specific topics or words. When searching for a word, the tool displays a graph where the horizontal axis represents time - which can be from the year 2004 onwards - and the vertical axis represents the number of searches.

It is possible to have a detail of the search by different criteria, like country, time (searches performed in the last five hours, for example), and type of search (by images, news, shopping, YouTube search or “web search”, which is the classic Google search).

* Examples and screenshots shown in this guide may vary according to the user’s geolocation. Screenshots have been included in the same language of the search.
It is also possible to compare different words or topics, for example in the same country and time period. The tool will then display a graph of the different terms or topics and a comparative map showing the most searched terms or topics in each region.

It is also useful to analyze Google searches in a particular country to see how much a topic or word is growing. When searching for specific words of misinformative content, it can also be useful to consider how much impact such content is having.
Bilingual toolkit for journalists covering Latino communities in the U.S.
Tools, examples and recommendation / Google Trends

How to use it

To get started, go to https://trends.google.com/trends/. There is no need to register or download anything.

The first page shows the most searched topics by country. In the “Explore” bar, we can search for a keyword or topic. For example, in this case, we searched for the term “ladybugs” in the United States in the last 30 days.

Trends results are part of Google’s overall results. The search engine groups the data, categorizes it, links it with a topic, and removes personal information.

To compare it, simply add terms, and the platform will display the information for each one with different colors. In this case, for example, we looked at searches for the terms “hurricane,” “earthquake,” and “storm”.

[Google Trends screenshots]

Note: This comparison contains terms and categories of search queries, which are displayed in different colors.
There are two samples of Google Trends data that can be accessed: the real-time data, which is a sample of the last seven days, and the rest of the data, which is a separate sample of real-time data that can be obtained from 2004 up to 72 hours prior to the search.

The numbers are on a scale of 0 to 100. The higher the interest index, the higher the search interest. This means that 100 is the top, the time with the highest search interest. On the other hand, the lower the index, the lower the interest.

The tool also shows the most searched terms related to the topic we add to the tool. This can help the user identify what people want to know about that specific topic.

The search will also appear broken down by region. For example, we can see if there are states where a search has grown at a given time, as shown in the image below when we type in “abortion.” We can also see how it has increased in Texas and Florida, which are among the three states with the largest Hispanic populations.

Example 1:
In this article about ladybugs and how to prevent an infestation, we used Google Trends to see how searches for “Why are there so many ladybugs?” made by users in the United States were evolving. We saw that they increased considerably between October 15 and October 27, 2023.
Example 2:
We also used this tool in this other article about an alleged hurricane called Ophelia (which does not exist). While we had seen this content mostly in English, we found search spikes in Google Trends with the Spanish term “huracán categoría 6” (category 6 hurricane) in both Florida and Texas between August 23 and August 30, so we assumed it was possible that this or similar content was reaching users in Hispanic communities.

To learn more about this tool, click here. You can also take this free online course.
CrowdTangle*

Tip for Journalists

Use this tool to analyze the impact of a post on Facebook, identify public profiles spreading it and accounts generating the most interactions. You can also create your own lists and organize them to show you the profiles, topics and organizations you want to monitor.

What is it?

CrowdTangle is a Google Chrome extension for analyzing content on Facebook and Instagram. It is an open and free tool from Meta, to which Facebook belongs.

What is it for?

It tracks and measures the impact of links shared on social media platforms. It visualizes the spread of content on Facebook and shows groups and public profiles that disseminated it, with dates.

How to use it

You need to have a Facebook account. First, download the extension. Once downloaded, the icon will appear on the top right corner.

* Examples and screenshots shown in this guide may vary according to the user’s geolocation. Screenshots have been included in the same language of the search.
To see how viral a piece of content is, simply access the page, article or link you want to analyze and click on the CrowdTangle icon, which appears on the top-right corner with other Chrome extensions. It will then show how many times the piece has been shared and which accounts generated the most interactions.

You can even access these specific posts on the platform you want to analyze by clicking on the last column on the right, where it says “Link”. In this case, besides seeing the post’s impact, you can also identify groups that systematically share this type of content.
Example:
In 2021, articles circulated claiming that Pfizer had patented a device to track vaccinated individuals. The post, which turned out to be false, went viral on Facebook, and we obtained data from the CrowdTangle tool.

As we can see from this screenshot, CrowdTangle is also useful to show in which groups a post was shared and when, and we can directly join those groups and get more information.
Fact Check Explorer

Tip for Journalists

This search engine allows you to check whether other organizations have already verified the truth or falsehood of content circulating on the Internet. The tool is available in English, Spanish, Portuguese, Turkish and Bengali.

What is it?

It is a Google tool that can search and find fact-checks that have been done by organizations from all over the world.

What is it for?

Fact Check Explorer shows verifications on topics that have already been researched by various organizations or media outlets around the world. It can be used to see if disinformative or suspicious content has already been debunked, as well as to search for and access disinformation that has been spread about a topic, person, or institution.

How to use it

It is used like any other search engine, but its results are verified by media outlets and organizations from different countries. Access the website https://toolbox.google.com/factcheck/explorer and choose the word(s) you want to search for. You can filter the verifications in English, Spanish, Portuguese, Turkish and Bengali, or view the results in all languages directly.

* Examples and screenshots shown in this guide may vary according to the user’s geolocation. Screenshots have been included in the same language of the search.
Example:
In this case, we are looking for fact-checks about Argentine soccer player Lionel Messi. We can access the fact-checks and see who created them.

In this other case we search in Spanish for “vacunas” and we obtain verifications on the subject that have been made even in other countries.
If we type “mass shooting” the search engine we get the following result:
El Desgrabador / Video-to-text converter*

Tip for Journalists
El Desgrabador is a video-to-text converter that will allow you to quickly get transcripts of YouTube videos that feature subtitles or automatic captions.

What is it?
It’s a free open-source app, developed by Chequeado, that converts videos uploaded to YouTube with automatic or manually created subtitles to text.

What is it for?
This tool transcribes videos from YouTube. It also searches for specific words in the text and, by clicking on those words, goes to the exact moment they’re spoken in the video, thus checking if the transcription is accurate. The tool works in Spanish, English, and Portuguese.

How to use it
Visit this website and copy the link of the YouTube video you want to get the transcript of. In this example, we aim to obtain the transcript of Tucker Carlson’s interview with Donald Trump, which took place on August 23, 2023.

* Examples and screenshots shown in this guide may vary according to the user’s geolocation. Screenshots have been included in the same language of the search.
When clicking on “Desgrabar”, the video’s corresponding transcript will appear below.

By clicking on particular words or phrases, we can see the moment they were said in the video. We can also change the language and search for specific words in the transcript.
Example:

This is President Joe Biden's State of the Union address in 2023, posted by C-Span on YouTube:

https://www.youtube.com/watch?v=sfe2sOi-apk

As it has subtitles available, we can paste the link in “El Desgrabador”:

And get the transcription in Spanish:
Excerpt from the first part of the transcript.

[Content of the transcript is not transcribed here due to the nature of the image.]
Factchequeado’s Chatbot*

Tip for Journalists
Add Factchequeado’s chatbot to your WhatsApp contacts and instantly check if content is true or false. In case the content has not been verified yet, a team of fact checkers will check its veracity and send you the results. This tool is available in Spanish.

What is it?
It’s an automated WhatsApp bot in Spanish developed by Botalite that allows the public to verify content.

What is it for?
This tool provides users a fast and reliable way to verify multimedia content received or consumed daily on mobile phones. By checking the authenticity of images, audios, and videos, the chatbot helps to reduce the spread of misinformation.

How to use it:

Step 1
Add the number to your phone
Before you start using Factchequeado’s WhatsApp chatbot, make sure you have the number saved in your contacts list. The number is +1 (646) 873-6087. Or you can click here to access the chat directly.

Step 2
Start a conversation
Simply type “Hola” in the chat (this chatbot works in Spanish). The chatbot will respond immediately and display a menu with various options.

2 Examples and screenshots shown in this guide may vary according to the user’s geolocation. Screenshots have been included in the same language of the search.
Bilingual toolkit for journalists covering Latino communities in the U.S.
Tools, examples and recommendations/ Factchequeado’s Chatbot

**Step 3**
Verify content
Once you’ve started the conversation, the chatbot will offer you options. Click on “Verificar contenido” (“Verify content”) to begin the verification process.

**Step 4**
Send the content
Now, just send the multimedia content you want to verify. You can send images, audio, or videos directly from your device.

**Step 5**
Receive verification
If the content has been previously verified by Factchequeado, the chatbot will send you the verification in real time. If it’s new content, it will undergo a verification process led by Factchequeado’s fact-checkers.
Once it’s been verified, you will receive a message indicating whether the content is true or false.
Example 1:
A viral video showing clouds falling and drifting down the street.
Bilingual toolkit for journalists covering Latino communities in the U.S.
Tools, examples and recommendations/ Factchequeado's Chatbot

Example 2:
A viral video of an alleged Palestinian funeral.

Example 3:
A viral video about FEMA allegedly leaving everyone without internet.
Bilingual toolkit for journalists covering Latino communities in the U.S.
Tools, examples and recommendations / Factchequeado’s Chatbot

Purpose of Factchequeado’s Chatbot’s Weekly Newsletter
Factchequeado has a newsletter via WhatsApp that you can subscribe to for free and receive a selection of fact-checks and explanations every Sunday. You can subscribe here.
Credits


With the support of the teams from Chequeado Educación and Maldita Educa.

Editing: Dolores Arrieta, Laura Zommer, Randy Pitch y Kat Duncan.

Translation: Malena Saralegui

We would like to thank all Factchequeado’s allies who provided feedback during the production and writing process.