



Detecting Misinformation

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(We start at 2:15!)



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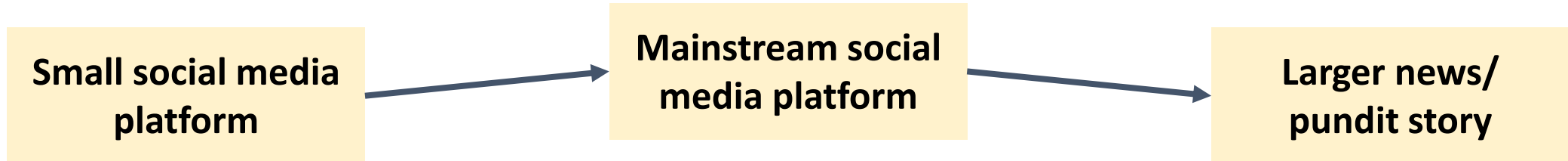


What is misinformation?

- Misinformation is verifiably inaccurate information that is spread by someone (or some people) thinking it is true.
- Also relevant:
 - Rumors
 - Misleading claims
- Misinformation detection is **always** harder and more time consuming than misinformation production.

Misinformation Online

Misinformation spreads more easily when it is “traded up the chain,” from smaller platforms to larger ones.



Fake news? Trump supporters circulate rally crowds ... but it's not

Blunt Message


Don't be fooled again: That huge photo is not a Trump rally

Washington Post


News

Journalists and Media Use

Tweet



 Tennessee @TEN_GOP

Massive crowd waiting outside for the Trump rally in Phoenix!
But...but...media says everyone hates Trump.. I'm confused.
#PhoenixRally



8/22/17, 16:22

Tweet your reply

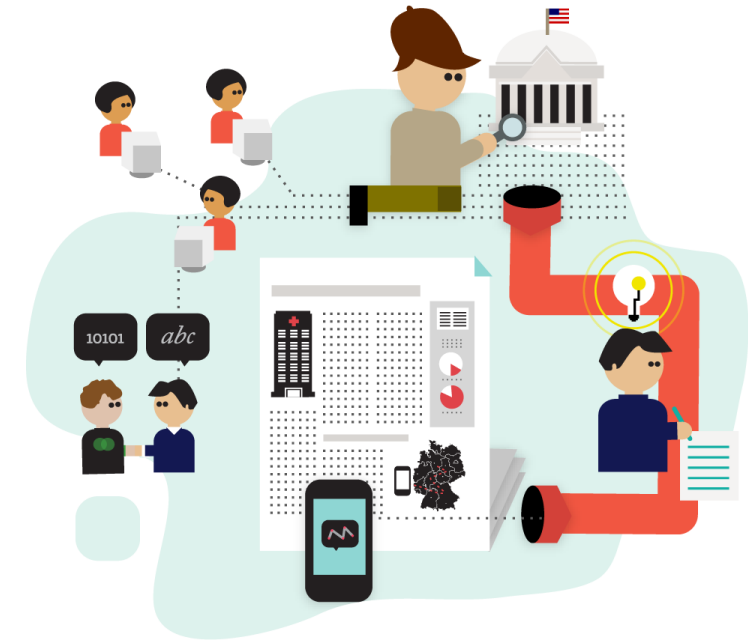
   

"My followers are used to me doing this," said McNeil. "I put it out there, and then the fun starts."



Using data tools in misinformation detection

- Misinformation leaves traces
 - Detecting doctored images (including deepfakes)
 - Meta-data
 - Account information
- We can use data tools to seek out and identify these traces.

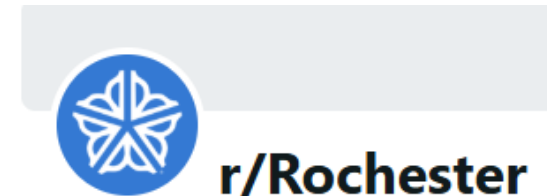
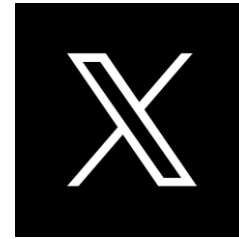


A data-driven approach to detecting misinformation

1. Tracking
2. Detecting
3. Reporting
4. (Data journalism)

Data Tracking: Where Should I Be Looking?

- National Spaces
 - X/Twitter, Facebook, YouTube, Instagram
 - “Pink Slime” journalism
- Localized Spaces
 - Local Facebook Group
 - Next Door
 - Local Reddit



These can be a lot to track individually. What if we wanted to see them in the aggregate?

Data Tracking: Some Resources

Tools for surveilling social media for misinformation. Some of these are platform specific, while others are more general.

- **Junkipedia** (for checking multiple social media)
- **Google Fact Check Tools** (for existing fact checks)
- **ClaimBuster** (AI fact-checking + human team)
- **Ad libraries (Weslyean, Meta Ad Library)**

Trainings for misinformation tracking

- **First Draft** (<https://firstdraftnews.org/bucket/our-training/>)

Data Tracking: Junkipedia

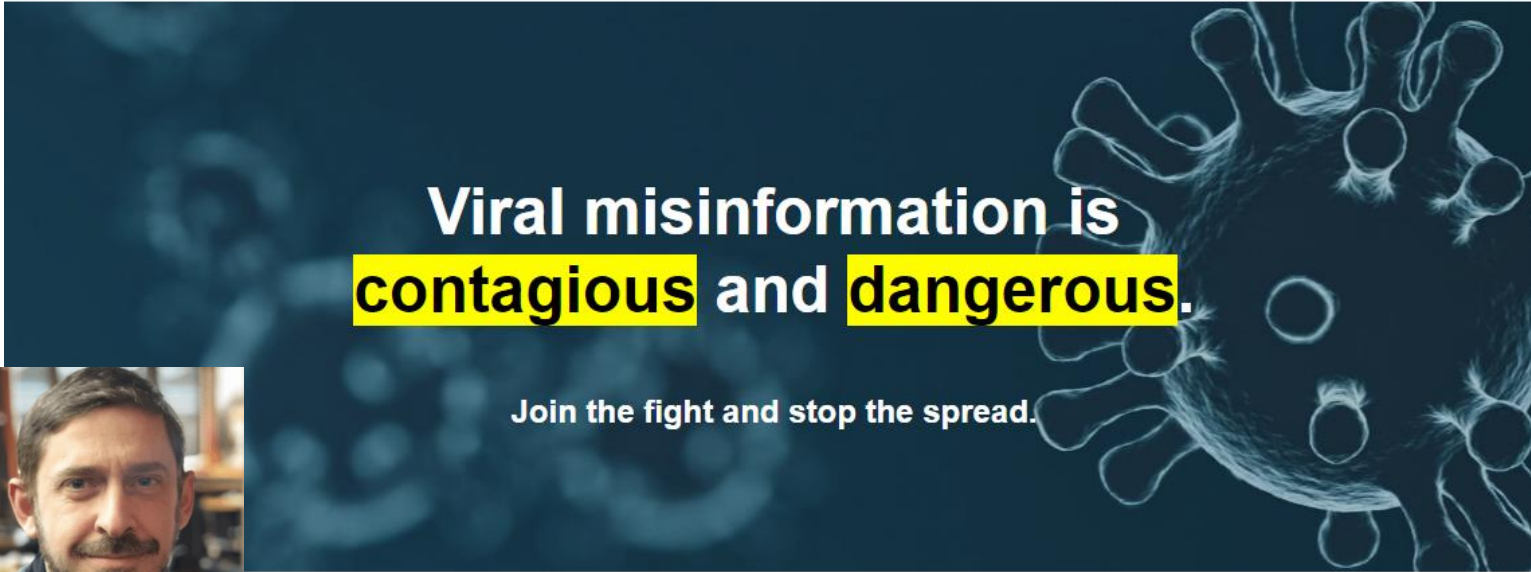
<https://www.junkipedia.org/apply>

Apply to Join Junkipedia

Please provide information about your organization to apply for an account to use Junkipedia.


How do you plan to use Junkipedia?

Junkipedia Login



Viral misinformation is contagious and dangerous.

Join the fight and stop the spread.



1. Free!
2. Better for image analysis
3. [Cameron Hickey](#)

Quick Demo of Junkipedia



https://www.junkipedia.org/users/sign_in

The screenshot shows the Junkipedia web application interface. At the top, there is a navigation bar with options like 'Add Tip', 'Narratives', 'Monitor', 'Issues', and 'Agents'. A user is signed in as 'jukito@utexas.edu'. Below the navigation bar, there is a search bar and filters for 'Filter Issues', 'View As', and 'Sort By' (Newest, Highest Threat, Recently Updated). The main content area displays '2196 Issues' with a 'Download CSV' button. The interface is divided into three columns of issue cards:

- Left Column:** An issue titled 'CNN Sucks and escorted out. BBC sitting next to me.' with a video thumbnail showing a 'POP-GOD 8' sign. The description mentions a partial recording of a speech by Michael Flynn at a QAnon event in Dallas. It has 417 total engagements and tags for 'youtube', 'Conspiracy', 'Edit Tags', 'QAnon', and 'jukito@utexas.edu'.
- Middle Column:** An issue titled 'reel' with a video thumbnail showing a person in a red outfit. It has 47 likes and is tagged with 'View more on Instagram'.
- Right Column:** A Twitter post by Daniel Kibret (@danielkibret) with Amharic text. It has 1.7K likes and is tagged with 'twitter', 'Edit Tags', and '[Edit Narratives]'. The text includes a URL: https://twitter.com/danielkibret/status/1567496687618342912?s=46&t=AH6PXe8iISPLWe_h07HOg.

On the right side of the interface, there are two charts:


- Themes over time:** A line chart showing the frequency of various themes from August 14 to September 1. The themes include FBI, elections, covid-19, january 6th, LGBTQ+, vaccines, DOJ, gun violence, monkeypox, and education. The FBI theme shows a significant peak around August 20.
- Popular Terms:** A horizontal bar chart showing the most popular terms. The terms listed are fbi, a, raid, trump, mar, lago, president, doj, and roma. 'fbi' is the most popular term.

Data Tracking: Audience Tip Sheet

Sometimes, the best tips can come from your viewers/readers. Having an open tip sheet can be useful for soliciting local misinformation that has been spreading.

Setting one up

- Open tip sheet
 - Prioritize common ones
 - Focus on claims with links or sources



AI-GENERATED
:::
✓ VERIFY

Viral image claiming to show wreckage of DC plane crash is fake

An AI image falsely depicts the deadly American Airlines crash. Distorted text, floating vehicles, and incorrect details are all clues the image was made with AI.

Verify is on a mission to separate fact from fiction in news and social media. We respect truth above all and believe in transparency. If you see a story online or hear a rumor you want verified, let us know. Just tell us your name, city and the story you'd like us to Verify. All submissions may be used in a Verify segment or promotion.

[Submit VERIFY Question](#)

Quick Demo of Meta Ad Library



<https://www.facebook.com/ads/library/>



Ad Library

Ad Library

Search all the ads currently running across Meta technologies, as well as:

- Ads about social issues, elections or politics that have run in the past seven years
- Ads that have run anywhere in the EU in the past year

To find an ad, search for keywords or an advertiser.



Search ads

Set your location and choose an ad category to start your search. [View search tips.](#)

United States ▼

Ad category ▼

🔍 Choose an ad category

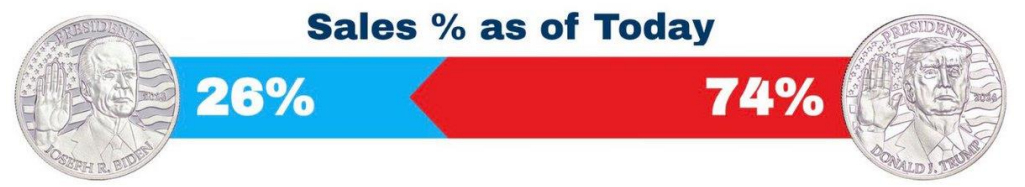
🔖 Saved searches

Financial Scams and Spams



Roll over image to zoom in

OFFICIAL 2024 President / PRISON™ COLLECTION



EXPIRES ON ELECTION DAY IN

198 **6** **9**
DAYS HOURS MINUTES

Pro-Biden Coin		Pro-Trump Coin	
Biden President Front of Coin	Trump Prison Back of Coin	Trump President Front of Coin	Biden Prison Back of Coin

[2] Detecting Misinformation

- We can use data tools to detect a variety of misinformation forms:
 - Messages/claims
 - Images
 - Users (e.g., sockpuppets and bots)
- But you should also learn some “giveaways” of common forms of misinformation (e.g., AI images)



Detecting Misinformation

In the next few slides, I'm going to show you some photos. Can you figure out which ones are AI and which ones are not?













Doctored Image Detection

- FotoForensics (<https://fotoforensics.com/>)
 - Useful for detecting manipulated images
 - <https://fotoforensics.com/tutorial.php?tt=about>
- Deepware (<https://deepware.ai/>)
 - Useful for detecting deepfakes



deepware®

Scan & Detect Deepfake Videos

Place a video link or upload a video

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



By submitting data, you are agreeing to [Terms of Services](#) and [Privacy Policy](#)

SCAN

BETA

Tineye (<https://tineye.com/>)

- Reverse image search; an alternative to Google Reverse Image Search
- Once you detect misinformation in an image, you can use TinEye to see it's spread



[Search](#)

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[We are hiring](#)

 Upload

Paste or enter image URL



5,147 results

Searched over 55.8 billion images in 3.5 seconds for:
narratively.com/wp-content/uploads/2020/05/QAnon-05.png

- Include 400 results not available
- Show only 19 results found in collections
- Show only 5 results found in stock

Using TinEye is private
and we do not save your
search images.

[3] Reporting on Misinformation

- Is it worth reporting on?
- Can I prove it is misinformation?
- Is there any important context I need to provide?

The Truth Sandwich!

- Reporting on a piece of misinformation shouldn't motivate people to believe it!

“ Truth Sandwich:

1. Start with the truth. The first frame gets the advantage.
2. Indicate the lie. Avoid amplifying the specific language if possible.
3. Return to the truth. Always repeat truths more than lies.

Source: Poynter



Reporting & Data Post-Hoc

- How we store the data after is also important
 1. Save a copy to your computer (like your screenshot)
 2. Archive the post on Junkipedia
 3. Archive the post on Internet Archive (in the Wayback Machine)
 4. Report the post

Junkipedia: Submitting a Tip

Adding to the archive

Submit a tip to

- Start by describing the problem: what makes it harmful? What is false, misleading, or inaccurate? What other context is necessary?
- Next, please provide a link to the problematic content you found. This can be a link to a social media post -- like a Facebook post, YouTube video, or a tweet -- or it can be a direct link to a website that contains the problem you're addressing.
- If you found something in the physical world, or somewhere you can't link to, you can take a photo or screenshot and upload it here.
- If relevant, you can also provide a location if this item targets or is relevant to a specific geographic community, like a particular neighborhood, city, or state.

Once you submit this form, you'll be taken to the detailed issue edit page where you can tag the issue and classify its threat.

Link to post or website

Please share a link to something problematic you found online

Describe the problem

You can explain what is wrong with the item you found here. Include additional links if necessary.

Location

If the problematic content targets or relates to a specific geographic location, enter it here.

Upload an image, screenshot, or video

If you don't have a link, you can upload a screenshot, a photo you took, a video, or any other file you found online.

Internet Archive (<https://web.archive.org/>)



Save Page Now

https://

SAVE PAGE

Capture a web page as it appears now for use as a trusted citation in the future.

Conclusion & Final Thoughts

1. Misinformation detection is a “cat and mouse” game
2. Data tools are a great gateway to using data without having to know code.
3. Open source tools (OSINT), particularly for detecting misinformation, have grown in variety
4. To take your misinformation detection to the next level, it helps to know a programming language.
5. [Be resourceful](#) and prepare to use a variety of tools and programs.



Thank you for all that you do for our democracy!