



CSMaP

CENTER FOR SOCIAL
MEDIA AND POLITICS

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Annual Report 2021–2022

NYU's Center for Social Media and Politics

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NEW YORK UNIVERSITY

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ABOUT NYU'S CENTER FOR SOCIAL MEDIA AND POLITICS

Social media and digital technology have transformed our society and presented urgent challenges to democratic governance. As policymakers reshape laws governing the online sphere, it's critical that these policies are informed by high-quality empirical evidence. NYU's Center for Social Media and Politics is a leading academic research institute studying this ever-shifting online environment at scale. We work to strengthen democracy by conducting rigorous research, advancing evidence-based public policy, and training the next generation of scholars.

ACKNOWLEDGMENTS

Gifts and grants fund everything we do, from undertaking ambitious research to building out a talented team of researchers. We are extremely grateful for all the support we have received from our funders, including the Charles Koch Foundation, Craig Newmark Philanthropies, Gates Foundation, Hewlett Foundation, Knight Foundation, National Science Foundation, Russell Sage Foundation, and Siegel Family Endowment.

Introduction

The past year has brought into stark relief the urgent need for systematic research on core topics at the intersection of digital technologies and politics. Facebook whistleblower Frances Haugen testified before Congress, sharing internal research suggesting that the company's platforms can fuel misinformation and increase political polarization both in the U.S. and abroad. The Russian invasion of Ukraine showed the speed at which propaganda and lies — as well as truth — can spread online. And as elections take place in the U.S. and abroad, political leaders continue to use social media to advance election fraud allegations and other falsehoods.

Against this backdrop, policymakers around the globe have marked social media regulation as a key priority. While updated policies are necessary for the networked digital environment, their success will largely be determined by the strength of the evidence that informs them.

Our research and outreach is animated by the belief that to make progress on the urgent democratic challenges introduced by our online environment, we must first have a deep and nuanced understanding of its impacts. That's where we excel. Through innovative research, teaching, and outreach, we work to understand politics, improve the public conversation, and strengthen democracy in the digital age. Our work this year made progress on some of this area's most pressing questions, including the influence of recommendation algorithms, the diffusion of misinformation and interventions to mitigate it, and the importance of data access to advance our research. We also engaged the growing network of civil society organizations, policymakers, and platform leadership, informing their work with our empirical findings.

At the center of this research is our robust data infrastructure and the diverse substantive expertise of CSMaP scholars. Together, our community continues to push the boundaries of academic study while working to train the next generation of scholars and experts. We are now a team of 17 full-time researchers and operations staff, with dozens of additional research assistants, affiliated faculty, and graduate students. We are deeply grateful for their dedication and collaboration, and to our community of funders and internal partners whose support makes our work possible.

The production of academic research is a continuous process: We complete and publish papers while starting new data collections to enable future work. This year was extraordinarily productive on both fronts. What follows is a summary of both the research completed over the past year, as well as the work that is underway.

With gratitude,

Zeve Sanderson
Executive Director

Jonathan Nagler
Faculty Co-Director

Joshua A. Tucker
Faculty Co-Director

Research

CSMaP's primary focus is the production of rigorous academic research and advancing scientific knowledge in public discourse. In this regard, the past year has been tremendously productive.

Since September 2021, we have published seven peer-reviewed journal articles and four working papers, pushed forward dozens of ongoing research projects, and launched a number of new initiatives.

Research Highlights

1

News Credibility Labels Have Limited Average Effects on News Diet Quality and Fail to Reduce Misperceptions ([Science Advances](#))

The internet and social media have reduced the cost of disseminating information. But it's also made it easier than ever to spread misinformation. Several proposals have been introduced to address this problem. Here, we found that “source credibility labels” — which aim to educate people about the quality of sources they consume in their search and social media feeds — don't change whether someone reads low-quality news sources. However, they do appear to improve the news diet quality of the heaviest consumers of misinformation.

2

Why Botter: How Pro-Government Bots Fight Opposition in Russia ([American Political Science Review](#))

Online propaganda continues to be a key way for authoritarian regimes like Russia and China to shape and distort the conversation on social media. In this paper, we investigate how pro-regime Russian Twitter bots work to silence adverse information, inflate support for the regime, and harass opposition leaders. The results demonstrate how bots — an easy-to-use and cheap technology — are yet another tool employed by non-democratic regimes in the modern digital information era.

3

Moderating with the Mob: Evaluating the Efficacy of Real-Time Crowdsourced Fact-Checking ([Journal of Online Trust and Safety](#))

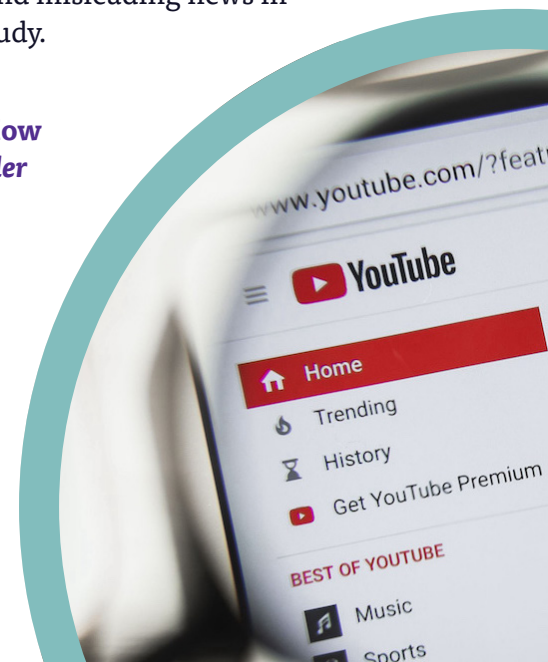
Social media companies have suggested using ordinary users to assess the veracity of news articles and combat misinformation. But ordinary users — and machine learning models based on information from those users — cannot effectively identify false and misleading news in real time, compared to professional fact checkers, according to our study.

4

Echo Chambers, Rabbit Holes, and Algorithmic Bias: How YouTube Recommends Content to Real Users ([paper under review](#); summary published at [Brookings](#))

Multiple media stories have posited that YouTube's recommendation algorithm leads people to extreme content. However, our researchers found that YouTube's recommendation algorithm does not, on average, drive people into extremist rabbit holes. It does, however, push users into mild ideological echo chambers and toward moderately conservative content.

View a full list of articles in the [Appendix](#).



Ongoing Research

As of September 2022, we have 29 ongoing research projects and an additional 16 papers at various stages of drafting. Project highlights include:

1 Bilingual Election Monitor

One of the major obstacles to understanding the nature and causes of our current democratic crisis is gaining a comprehensive view of the information that all Americans consume. To this end, in spring 2022, we began building a multilingual research infrastructure to better understand people's online media consumption and political opinions, with a focus on how social media informs (and misinforms) the public. The panel, which pairs regular surveys with digital trace data, has a strong emphasis on English- and Spanish-speaking Hispanics to study the Spanish-language media environment. At present, we have completed waves 1-3 of the survey, posted a preliminary [working paper](#), and published an analysis in [The Washington Post's](#) political science blog. We plan to publish more findings in the coming months.

2 Understanding the media environments of Ukraine and Russia

In light of the invasion of Ukraine, we have three ongoing projects examining information ecosystems and flows of Ukrainian, Russian, and American media. These projects focus on testing how language impacts susceptibility to misinformation in Ukraine and investigating how narratives from Russian state media propagate through U.S. domestic news sites and social media. In support of this, we have established a news collection infrastructure, which has collected nearly 2 million relevant articles. This infrastructure will support further research on global strategies and syndication of Russian state media.

3 Empirically testing interventions for decreasing belief in misinformation

We designed an innovative pipeline for collecting evaluations of popular news articles in real-time, focusing on news covering both Covid-19 and U.S. politics. Using this data, we empirically tested the efficacy of a number of popular interventions — such as searching for information online, hiding source information, and only providing an article's headline / lede. Out of this project, we currently have two papers that have been invited to be revised and resubmitted, as well as other papers being drafted.

Public Impact

Over the last year, our team focused on increasing the public impact of the Center's work in four primary ways: policy engagement, academic and public events, strategic communications, and network building.

Policy Engagement

The policy conversation around social media changed dramatically last fall with the release of the so-called Facebook Papers, internal research documenting the harms caused by the platform. Since then, there's been renewed attention around several legislative proposals, both in the U.S. and the EU, to regulate social media.

For our work, access to data continues to be the most important area for reform. To that end, in the last year we met with both Democratic and Republican staffers from eight different legislative and agency offices to discuss and provide feedback on various data access initiatives. We've also worked closely with Stanford's Nate Persily, who helped draft the Platform Accountability and Transparency Act, a bipartisan bill proposed in December 2021.

Academic and Public Events

Since fall 2021, CSMaP directors and experts have given more than 60 presentations at external events, ranging from academic conferences and workshops (e.g. UT Austin's Center for Media Engagement Digital Data Conference) to public-facing lectures (e.g. Stanford Institute for Research in the Social Sciences).

Internally, we also ran three events for public audiences, including a half-day virtual symposium on the future of social media featuring journalists, scholars, and policy experts. In total, our three public events welcomed more than 400 virtual attendees, and one was turned into a [podcast](#). We also hosted our third annual (and first in-person) academic conference, which welcomed more than 20 scholars from around the globe to present research, discuss future opportunities for collaboration, and network.



Strategic Communications

The past year was our first full year with a dedicated communications director, who leads our strategy to increase the public profile of CSMaP, our research, and our researchers. After developing a comprehensive communications plan last summer, he's worked to cultivate relationships with top journalists, launch a [new website](#), and advance our research agenda to key stakeholders. Here are some key metrics from the past year:

Media

CSMaP was cited in **140** news articles since September 2021, ranging from *The New York Times* and NPR to *The Hill* and *Politico*, which represents a **200 percent** increase from the previous year. In addition, we published a dozen articles in popular outlets, including *The Washington Post*, *Slate*, and *Brookings*, ranging from data-informed analyses to op-eds.

Website

We launched a new, redesigned CSMaP website in February 2022, which showcases and organizes our variety of research areas and products. Page views and visits increased immediately after launch and overall web traffic went up **60 percent** over the last year.

Twitter

In the past year, we gained more than **1,100** Twitter followers, an increase of **40 percent**. Our content received nearly **900,000** impressions and more than **18,000** engagements, more than doubling the previous year.

Email

Thanks to several successful events, our email list also grew considerably over the past year, increasing from about 250 to more than **1,150** today. Despite this increase in audience, our newsletters and updates continue to garner high open rates of more than **50 percent**, which is well above industry benchmarks.

Network Building

Led by our Executive Director Zeve Sanderson, we have been directly involved in supporting the overall field of academic, policy, and civil society groups focused on democracy and technology. Specifically, we have continued to play a leadership role in the formation and development of the Knight Research Network: Zeve co-authored a [report](#) identifying key areas for growth and impact, and Megan A. Brown, our Senior Research Engineer, has organized a group of engineers to foster collaboration on data collection and build standards for working within computational social science research centers. In addition, we signed on as a member of the [Media and Democracy Data Cooperative](#), a collaborative effort across multiple research centers to advance research using digital data.

Data Engineering

At the heart of our work is our massive data infrastructure, which leverages NYU's high-performance computing cluster to analyze billions of diverse data points, including social media and digital trace data. We also build and maintain open-source software tools and modeling that enable the broader research community. Here are key statistics regarding advancements over the past year.

Data Collections

SOCIAL MEDIA

Twitter – 50 billion tweets going back to 2016

YouTube – 100 million videos and 1 billion comments from 42 million channels

Reddit – 1.65 billion submissions and 12.66 billion comments since 2005

Meta (Facebook & Instagram) – 3.5 million posts by candidates for Congress, from 2016 to present

Gab – 30 million posts from 200,000 users

Gettr – 105 million posts from 4.5 million unique users

Rumble – 6 million videos from nearly 500,000 users

TikTok – Infrastructure in progress for collecting posts from 2022 candidates for Congress

Truth Social – Infrastructure in progress for collecting posts from all users

NEWS / MEDIA

For our project examining information ecosystems and flows of Ukrainian, Russian, and American media, we've collected more than 2 million unique news articles from dozens of sources since the beginning of January from:

- Popular news sources (e.g., **New York Times**, **Fox News**, **CNN**)
 - Low-quality news sources (e.g., **Daily Caller**, **Natural News**, **Gateway Pundit**)
 - Russian state media sources (in both English and Russian)
-

Notably, our collection infrastructure now has the capacity to easily add new sources.

- For example, we have plans to add an additional 250 sources over the next few months from English, Chinese, and Ukrainian-language sources.
-

Tools and Software

OPEN-SOURCE TOOLS

Our open-source software tools in Python and R were downloaded more than **100,000** times in the past year.

We shared a Gettr scraper, Rumble scraper, and Gab scraper with researchers at the University of Texas-Austin, Stanford, and other universities.

WEB PLUGINS

We partnered with Volunteer Science to collect Twitter and Facebook data for our Bilingual Election Monitor panel respondents. Recruited participants can take our survey and then be directed to Volunteer Science to provide social media data.

To support this work, we created two Chrome extensions:

- “URL Historian” collects web browsing data
- “Search engine results saver” collects YouTube URLs and page HTML



People

Pushing the boundaries of academic study requires a talented and cross-disciplinary group of researchers with knowledge of the latest data and social science techniques. In addition to scholars, research engineers, data scientists, and operations staff are vital to the breadth and depth of our research portfolio. Over the past year, we have expanded our team and continued our work to mentor students, train new researchers, and support and collaborate with CSMaP alumni.

Training & Hiring

By training students and postdocs, CSMaP develops a new generation of scholars and experts to explore some of the biggest questions at the intersection of social media and democracy. In the 2021-22 academic year, our faculty co-directors taught both undergraduate and graduate courses, mentoring more than three dozen undergraduate, masters, and PhD students. Since last fall, we have also welcomed three new postdoctoral fellows: Tiago Ventura, Hannah Waight, and Patrick Wu. Together, our postdocs serve as the Center's core research engine, representing methodological, substantive, and disciplinary diversity.

In the past year, we have also hired new team members — with expertise across academia, journalism, and civil society — to drive forward large, complex projects. We welcomed Cristina de la Puerta (Program Administrator), Sarah Graham (Research Operations Manager), Jason Greenfield (Research Engineer), Aaron Pope (Research Project Manager), Robert Vidigal (Research Data Scientist), and Angie Waller (Research Project Manager).

CSMaP Alumni

We also continued to support and collaborate with our alumni network, which includes more than two dozen researchers across academia and industry, and helped three postdoctoral fellows transition into new roles.



**JAMES
BISBEE**

joined Vanderbilt University
as an Assistant Professor in
Political Science and Data
Science



**KEVIN
ASLETT**

joined the University
of Central Florida as an
Assistant Professor in the
School of Politics, Security,
and International Affairs



**ZHANNA
TERECHSHENKO**

joined TikTok as a
Threat Researcher

By the Numbers

RESEARCH

CSMaP papers cited **1,500** times in 2022

7 peer-reviewed articles and **4** working papers published in the past academic year

16 papers in the drafting process and **29** ongoing research projects

4,006 people surveyed for the Bilingual Election Monitor project

PUBLIC IMPACT

More than **60** presentations by our experts at external events

400 (virtual) attendees at three CSMaP public events

200 percent increase in media mentions

60 percent increase in web traffic

40 percent increase in Twitter following

DATA ENGINEERING

50 billion tweets collected

100 million videos collected from YouTube

100 million posts from Gab and Gettr

2 million unique news articles from dozens of sources

100,000 downloads of our open-source tools

PEOPLE

37 undergraduate, masters, and PhD students mentored

75 hours per week worked by CSMaP undergraduate research associates

28 CSMaP alumni across academia and industry

Appendix

Peer-Reviewed Publications

[What We Learned About The Gateway Pundit from its Own Web Traffic Data](#) -

Workshop Proceedings of the 16th International AAAI Conference on Web and Social Media

[News Credibility Labels Have Limited Average Effects on News Diet Quality and Fail to Reduce Misperceptions](#) - *Science Advances*

[Why Botter: How Pro-Government Bots Fight Opposition in Russia](#) -

American Political Science Review

[What's Not to Like? Facebook Page Likes Reveal Limited Polarization in Lifestyle Preferences](#) -

Political Communication

[Short of Suspension: How Suspension Warnings Can Reduce Hate Speech on Twitter](#) - *Perspectives on Politics*

[Moderating with the Mob: Evaluating the Efficacy of Real-Time Crowdsourced Fact-Checking](#) -

Journal of Online Trust and Safety

[SARS-CoV-2 RNA Concentrations in Wastewater Foreshadow Dynamics and Clinical Presentation of New COVID-19 Cases](#) - *Science of the Total Environment*

Working Papers

[Echo Chambers, Rabbit Holes, and Algorithmic Bias: How YouTube Recommends Content to Real Users](#)

[Estimating the Ideology of Political YouTube Videos](#)

[To Moderate, Or Not to Moderate: Strategic Domain Sharing by Congressional Campaigns](#)

[Network Embedding Methods for Large Networks in Political Science](#)

Articles in the Popular Press

[Republicans Are Increasingly Sharing Misinformation](#) - *The Washington Post*

[Big Tech Must Step Up Now to Fight Misinformation in the Midterms](#) - *The Hill*

[How to Evaluate Elon Musk's \(Potential\) Impact On Twitter](#) - *Tech Policy Press*

[The People Who Believe Russia's Disinformation](#) - *Slate*

[Gender-Based Online Violence Spikes After Prominent Media Attacks](#) - *Brookings*

[Twitter Banned Marjorie Taylor Greene. That May Not Hurt Her Much](#) - *The Washington Post*

[Trendless Fluctuation? How Twitter's Ethiopia Interventions May \(Not\) Have Worked](#) - *Tech Policy Press*

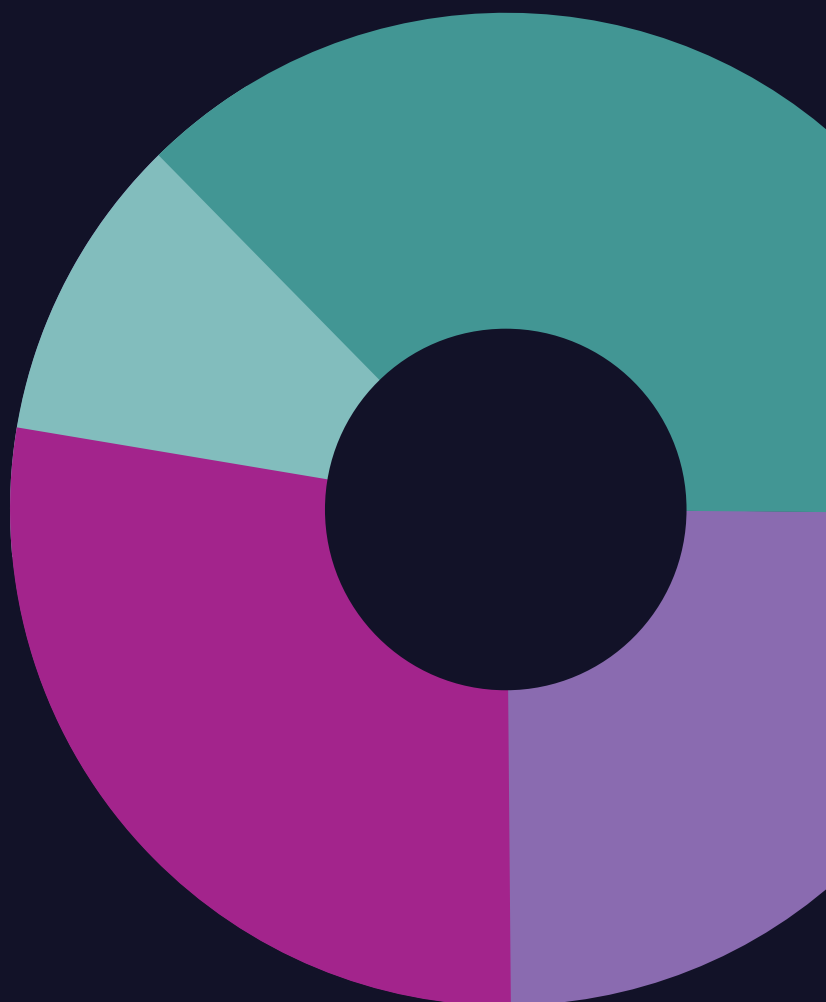
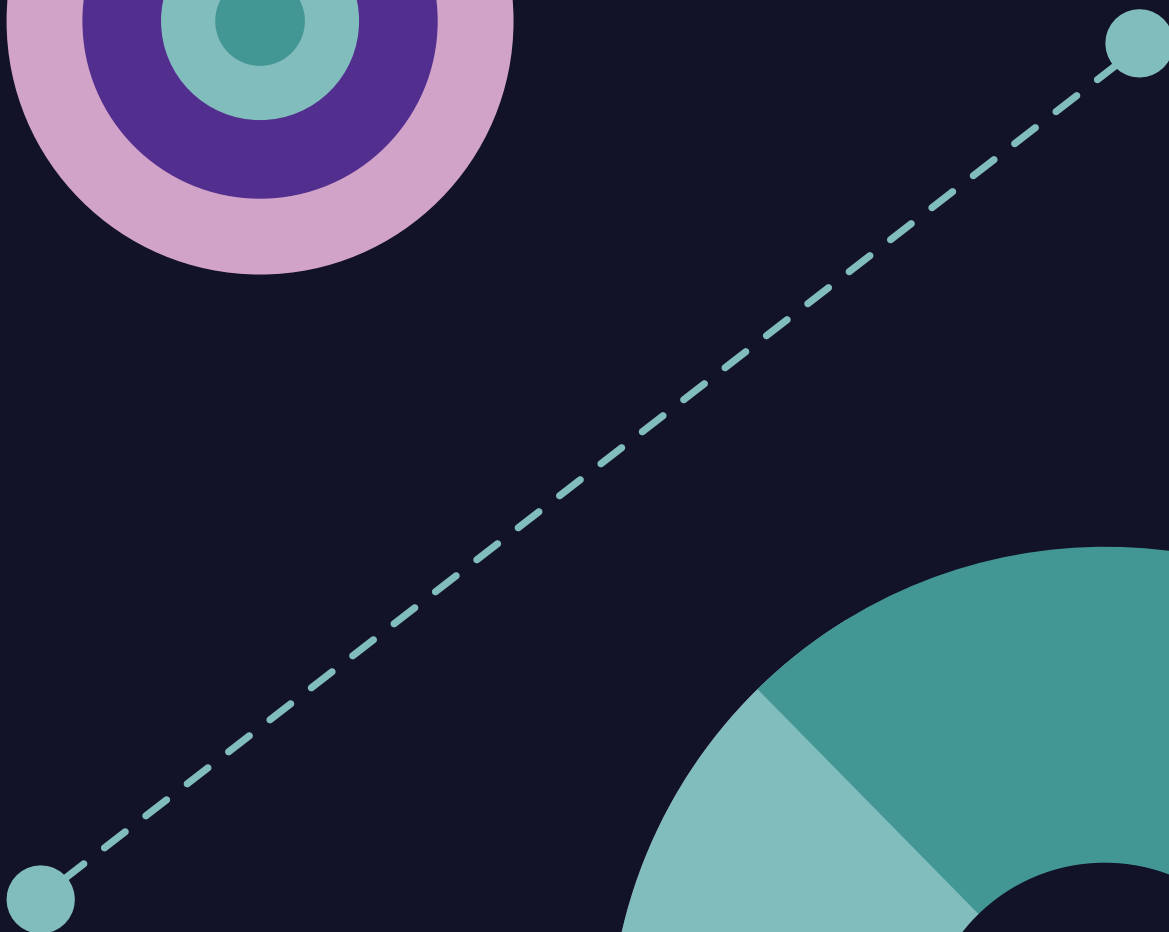
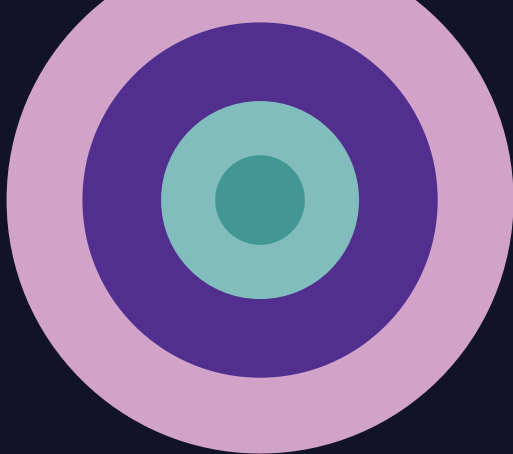
[A Modest Ox: Examining Two Approaches to Testing Crowdsourced Fact Checking](#) - *Tech Policy Press*

[How to Fix Social Media? Start with Independent Research](#) - *Brookings*

[Academic Researchers Need Access to the Facebook Papers](#) - *Slate*

[Twitter Amplifies Conservative Politicians. Is it Because Users Mock Them?](#) - *The Washington Post*

[Facebook, Open Your Data Trove](#) - *New York Daily News*



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