

# Making a Federal Case for Computing

Session Chairs



**Diana  
Franklin**  
University of  
Chicago



**Rachel  
Pottinger**  
University of  
British Columbia

# Two-Part Session

## Peter Harsha



Chief Operations Officer and Senior  
Director of Government Affairs  
**Computing Research Association**

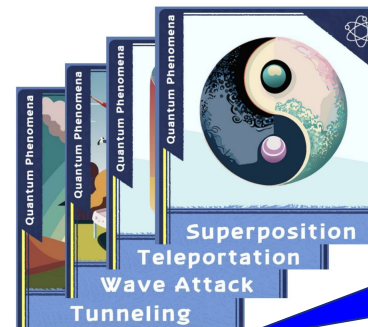
## Game Night



**Poker**



**Spades**



**Collapsing  
Qubits**

**International  
Debut!!!**

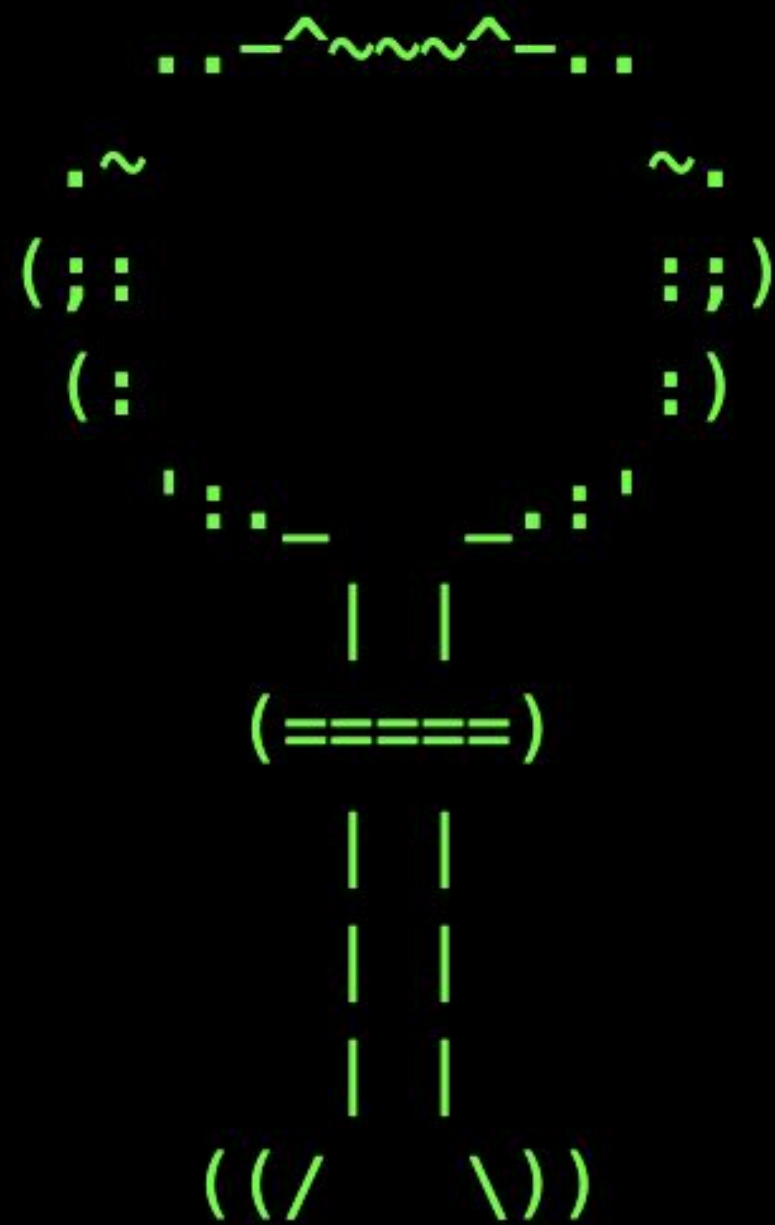
# Peter Harsha

Chief Operations Officer and Senior  
Director of Government Affairs  
**Computing Research Association**





**Making a Federal Case for Computing  
or  
“Wow, things just got complicated”**



# CRA Government Affairs



**Peter Harsha**  
COO and Senior Director,  
Government Affairs



**Brian Mosley**  
Associate Director,  
Government Affairs



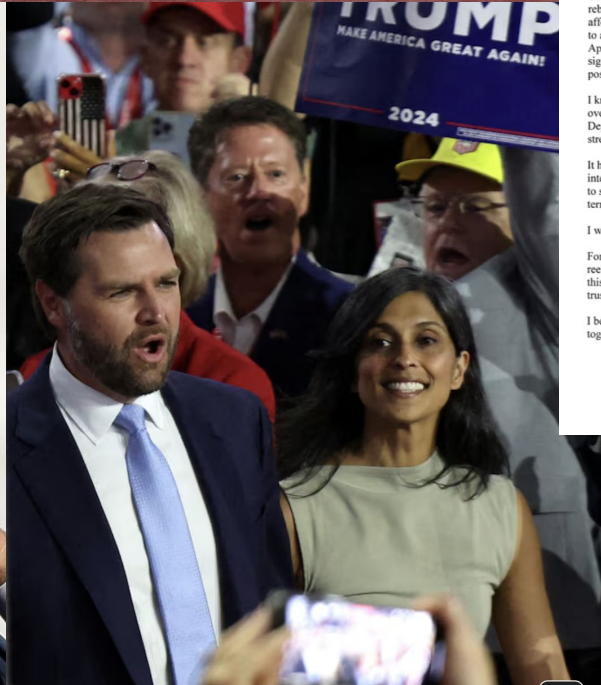


**“There are decades where nothing happens, and there are weeks where decades happen.”**

CNN PRESIDENTIAL DEBATE



us-supreme-court



JOSEPH R. BIDEN, JR.  
July 14, 2024  
My Fellow Americans,  
Over the past three and a half years, we have  
Today, America has the strongest economy in  
affordable health care to a record number of  
to a million veterans exposed to toxic substan  
Appointed the first African American woman  
significant climate legislation in the history of  
positioned to lead than we are today.  
I know none of this could have been done with  
overcame a once in a century pandemic and the  
Depression. We've protected and preserved our  
strengthened our alliances around the world.  
It has been the greatest honor of my life to ser  
intention to seek reelection, I believe it is in  
to stand down and to focus solely on fulfilling  
term.  
I will speak to the Nation later this week in m  
For now, let me express my deepest gratitude  
reelected. I want to thank Vice President Kam  
this work. And let me express my heartfelt app  
trust you have placed in me.  
I believe today what I always have: that there  
together. We just have to remember we are the



**“I am honored to have the President’s endorsement and my intention is to earn and win this nomination.”**

- VICE PRESIDENT KAMALA HARRIS

★ ★ ★ ★ ★  
**TRUMP**  
**VANCE**  
2024

*Biden Harris*  
**BIDEN**  
**HARRIS** ?

— 2024 —

???



# Tonight's talk...

- A few issues we're watching closely now and what we're doing (or not doing) about them
- How you can engage
- Q&A – time permitting



# CRA

Computing Research  
Association

2024  
CRA CONFERENCE

## Mission:

“to catalyze computing research by joining with industry, government, and academia.”

## CRA executes this mission by:

- leading the computing research community;
- informing policymakers and the public; and
- championing a diverse, welcoming, equitable, and socially responsible computing research community.

# CRA Government Affairs

2024  
CRA CONFERENCE



• Alex Aiken, Stanford - Chair



Stephanie Forrest, ASU

Nancy Amato\*, UIUC

Ovidiu Daescu, U of Texas, Dallas

Sandhya Dwarkadas, UVA

Yolanda Gill, USC

William Gropp, UIUC

Gillian Hayes, UC Irvine

Ming Lin, Maryland

Dan Reed, Utah

Vivek Sarkar, GaTech

Robert Sloan, U of Illinois, Chicago

Eugene Spafford, Purdue

Alexander Wolf, UC Santa Cruz

Ben Zorn, Microsoft



**CRA**

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Computing Research  
Association

**Goal: To be the “organization of record”  
for computing research issues in DC**



# “Ensuring the Health of the R&D Ecosystem”



- Access to Talent
- Impediments to Research
- Research Funding and Priorities
- Socially Responsible Computing

# Challenges - Process



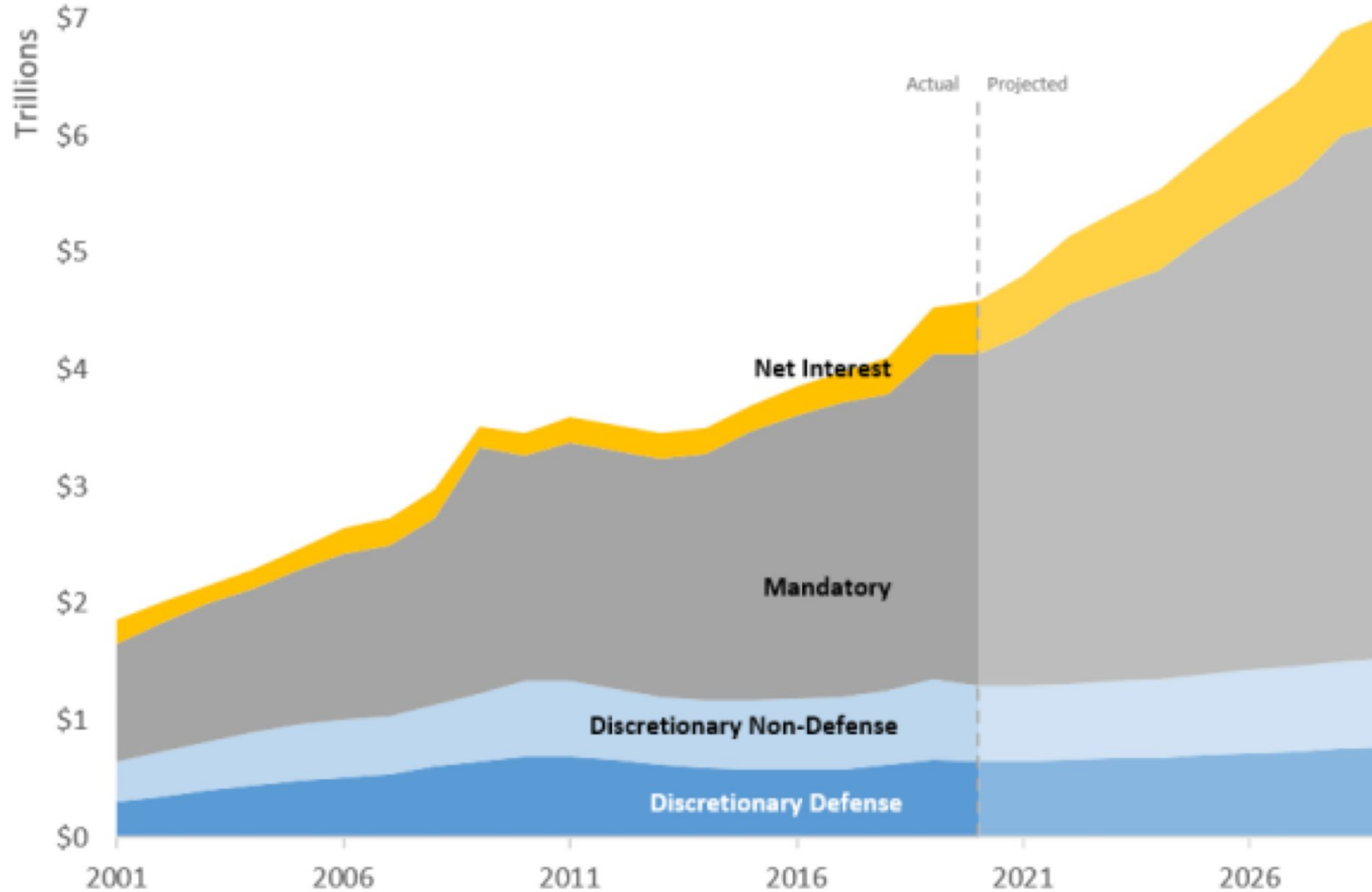
[https://upload.wikimedia.org/wikipedia/commons/a/aa/Visualization-of-How-a-Bill-Becomes-a-Law\\_Mike-WIRTH.jpg](https://upload.wikimedia.org/wikipedia/commons/a/aa/Visualization-of-How-a-Bill-Becomes-a-Law_Mike-WIRTH.jpg)

# Challenges - Process



<https://www.nytimes.com/2018/03/30/us/politics/omnibus-bills-congress.html>

# Challenges - Fiscal Reality





# Challenges - Ubiquity of Computing



*What GenAI thinks Congress claiming jurisdiction over AI looks like*

# Topics



- Research Security
- Mis- and Dis-information Research
- Problematic actions by states (primarily around DEI)
- The Next Administration

[cra.org/blog](https://cra.org/blog) – Computing Research Policy Blog

# Research Security

- Improper foreign influence in federally-funded research
- Research agencies are under pressure from policymakers to take action

# Research Security - 2

2024  
CRA CONFERENCE



## CRA RESEARCH POLICY VIRTUAL TOWN HALL

*Research Security*

*with special guest: Rebecca Keiser,  
NSF's Chief of Research Security Strategy & Policy*

*March 1<sup>st</sup>, 2024*



Rebecca Spyke Keiser, Ph.D.  
Chief of Research Security Strategy and Policy  
National Science Foundation



# Research Security - 3



EXECUTIVE OFFICE OF THE PRESIDENT  
OFFICE OF SCIENCE AND TECHNOLOGY POLICY  
WASHINGTON, D.C. 20502

July 9, 2024

MEMORANDUM FOR THE HEADS OF FEDERAL RESEARCH AGENCIES

FROM: Arati Prabhakar  
Assistant to the President for Science and Technology  
Director of the Office of Science and Technology Policy

SUBJECT: Guidelines for Research Security Programs at Covered Institutions

To address risks posed by strategic competitors to the U.S. research and development (R&D) enterprise, the Biden-Harris Administration is implementing several measures to improve research security while preserving the openness that has long enabled U.S. R&D leadership throughout the world and without exacerbating xenophobia, prejudice, or discrimination.

This memorandum provides federal research agencies with guidelines for implementing a certification requirement imposed by National Security Presidential Memorandum-33 (NSPM-33).<sup>1</sup> Specifically, federal research agencies must require certain research institutions (“covered institutions”) to certify to the funding agency that the institution has established and operates a research security program, including several specific elements described in detail below.

These guidelines are issued in accordance with NSPM-33 and certain provisions of Public Law 117-167 (the CHIPS and Science Act).<sup>2</sup> The White House Office of Science and Technology Policy (OSTP)—in consultation with National Science and Technology Council (NSTC) Subcommittee on Research Security, the Office of Management and Budget (OMB), and stakeholders—is responsible for developing a “standardized requirement” for “uniform implementation” across federal research agencies.<sup>3</sup> This memorandum describes and sets forth that standardized requirement.<sup>4</sup> It reflects the significant work of the NSTC Subcommittee on

<sup>1</sup> “Presidential Memorandum on United States Government-Supported Research and Development National Security Policy.” The White House (January 14, 2021) §4(g). <https://trumpwhitehouse.archives.gov/presidential-actions/presidential-memorandum-united-states-government-supported-research-development-national-security-policy/>

<sup>2</sup> Pub. L. 117-167 §10634, 42 U.S.C. §19234. [https://www.congress.gov/bill/117th-congress/house-bill/4346/text](https://www.congress.gov/bills/117th-congress/house-bill/4346/text)

<sup>3</sup> “Guidance for Implementing National Security Presidential Memorandum 33 (NSPM-33) on National Security Strategy for United States Government-Supported Research and Development.” National Science and Technology Council (NSTC), January 2022. pp.18-21. <https://www.whitehouse.gov/wp-content/uploads/2022/01/010422-NSPM-33-Implementation-Guidance.pdf>

<sup>4</sup> This guidance is intended to be consistent with NSPM-33 and relevant portions of the CHIPS and Science Act. It supersedes, in full, the portions of the NSTC Implementation Guidance describing Research Security Programs (see, in particular, pp. 18-21). With respect to section 4(g) of NSPM-33, the guidance in this memorandum sets forth the “standardized requirement” for “uniform implementation” across federal agencies, as contemplated by the NSTC

Program elements include:

- Cybersecurity
- Foreign Travel Security (reporting)
- Research Security Training
- Export Control Training

Guidelines:

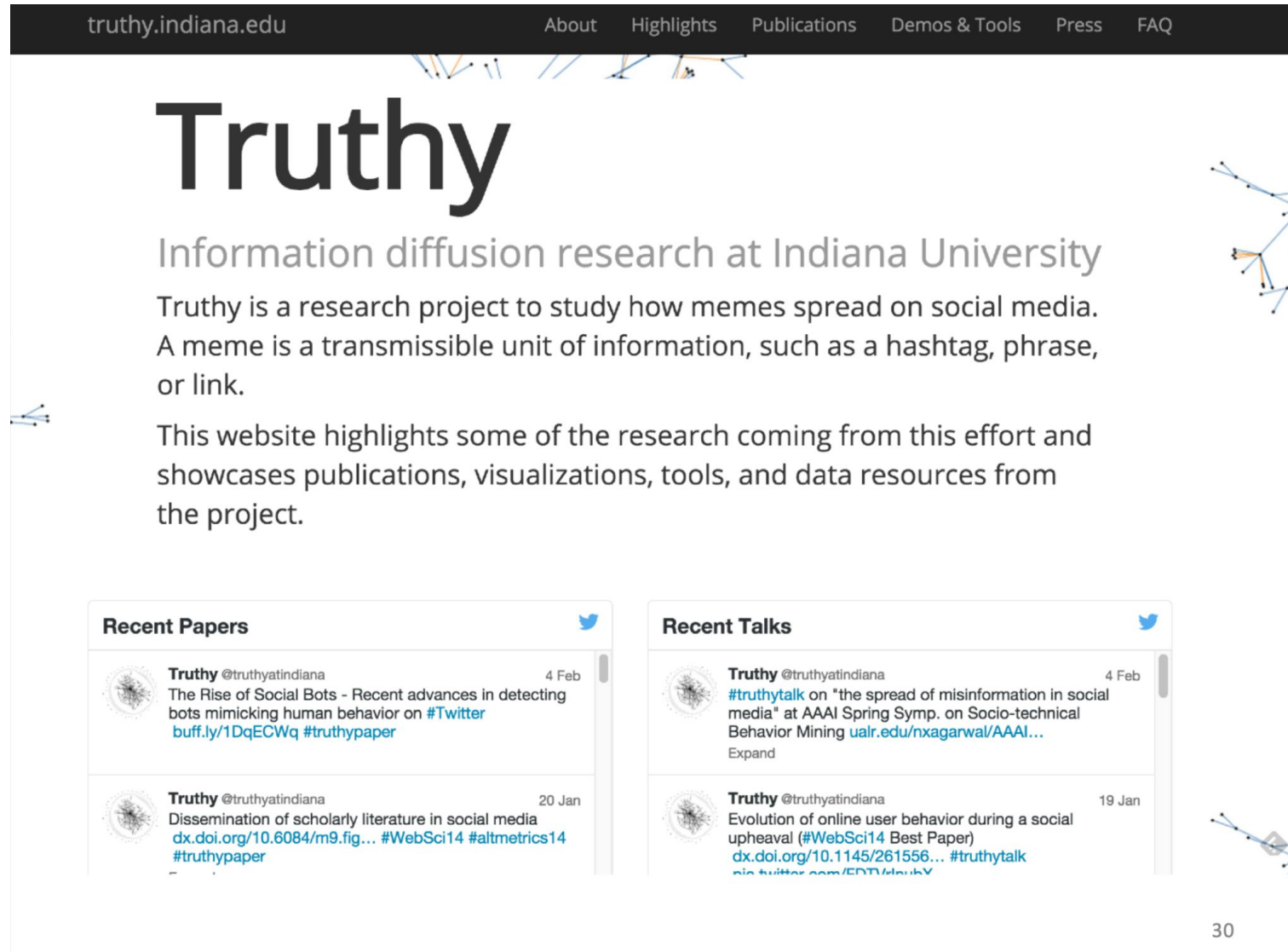
- Don’t stigmatize or discriminate
- Flexible
- Minimal admin impact
- Minimal impact to smaller institutions

# Mis- and Dis-Information Research



Rep. Jim Jordan (R-OH)

# Mis- and Dis-Information Research - 2



The screenshot shows the homepage of the Truthy website. At the top is a navigation bar with the URL 'truthy.indiana.edu' and links for 'About', 'Highlights', 'Publications', 'Demos & Tools', 'Press', and 'FAQ'. The main heading is 'Truthy' in a large, bold font. Below it is a subtitle 'Information diffusion research at Indiana University' and a paragraph explaining the project: 'Truthy is a research project to study how memes spread on social media. A meme is a transmissible unit of information, such as a hashtag, phrase, or link.' This is followed by another paragraph: 'This website highlights some of the research coming from this effort and showcases publications, visualizations, tools, and data resources from the project.' At the bottom, there are two columns of 'Recent Papers' and 'Recent Talks', each containing two entries with dates, titles, and links. The background features abstract network diagrams.

truthy.indiana.edu   About   Highlights   Publications   Demos & Tools   Press   FAQ

# Truthy

Information diffusion research at Indiana University

Truthy is a research project to study how memes spread on social media. A meme is a transmissible unit of information, such as a hashtag, phrase, or link.

This website highlights some of the research coming from this effort and showcases publications, visualizations, tools, and data resources from the project.

### Recent Papers

- Truthy** @truthyatindiana 4 Feb  
The Rise of Social Bots - Recent advances in detecting bots mimicking human behavior on #Twitter  
[buff.ly/1DqECWq](http://buff.ly/1DqECWq) #truthypaper
- Truthy** @truthyatindiana 20 Jan  
Dissemination of scholarly literature in social media  
[dx.doi.org/10.6084/m9.fig...](http://dx.doi.org/10.6084/m9.fig...) #WebSci14 #altmetrics14 #truthypaper

### Recent Talks

- Truthy** @truthyatindiana 4 Feb  
#truthytalk on "the spread of misinformation in social media" at AAAI Spring Symp. on Socio-technical Behavior Mining [ualr.edu/nxagarwal/AAAI...](http://ualr.edu/nxagarwal/AAAI...)  
Expand
- Truthy** @truthyatindiana 19 Jan  
Evolution of online user behavior during a social upheaval (#WebSci14 Best Paper)  
[dx.doi.org/10.1145/261556...](http://dx.doi.org/10.1145/261556...) #truthytalk  
[nic.twitter.com/EDT/rlubY](https://twitter.com/EDT/rlubY)



# Mis- and Dis-Information Research - 3

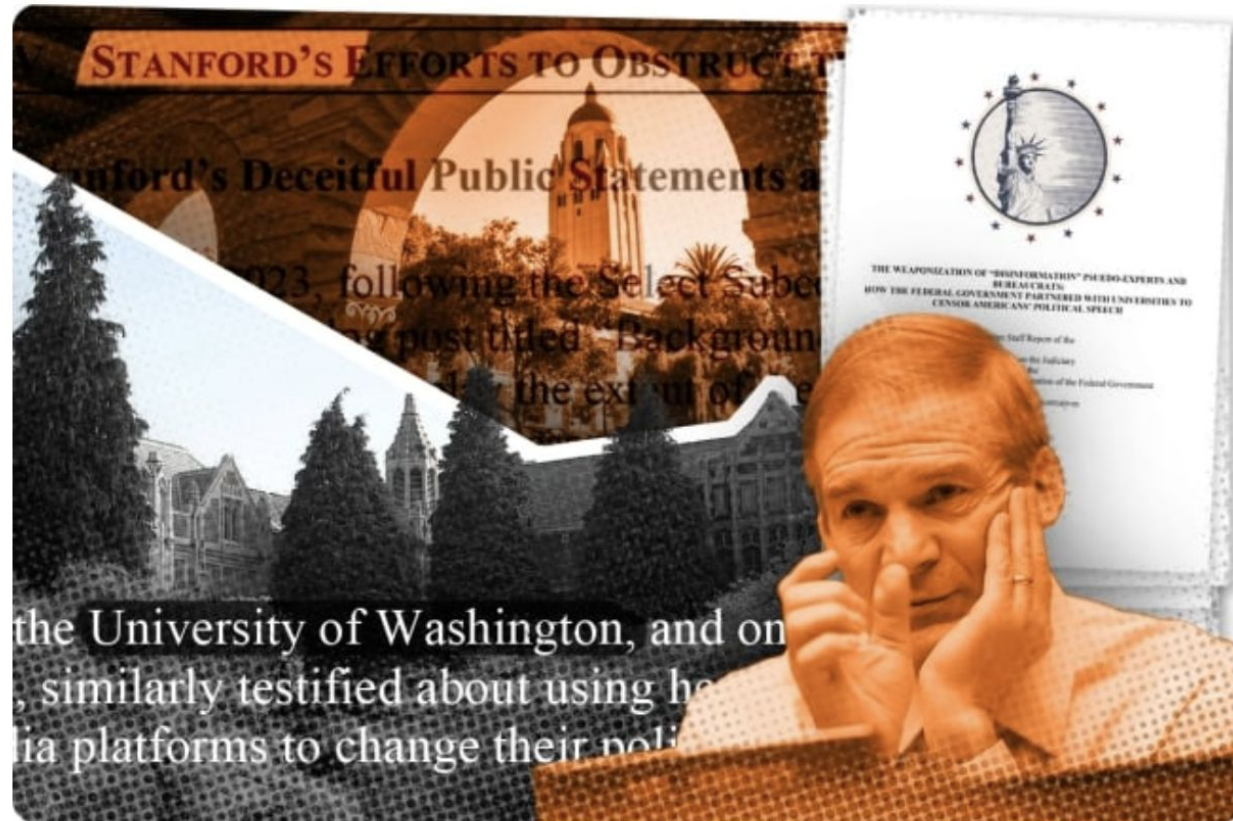


**THE WEAPONIZATION OF "DISINFORMATION" PSEUDO-EXPERTS AND BUREAUCRATS:  
HOW THE FEDERAL GOVERNMENT PARTNERED WITH UNIVERSITIES TO CENSOR AMERICANS' POLITICAL SPEECH**

Interim Staff Report of the  
Committee on the Judiciary  
and the  
Select Subcommittee on the Weaponization of the Federal Government  
U.S. House of Representatives



November 6, 2023



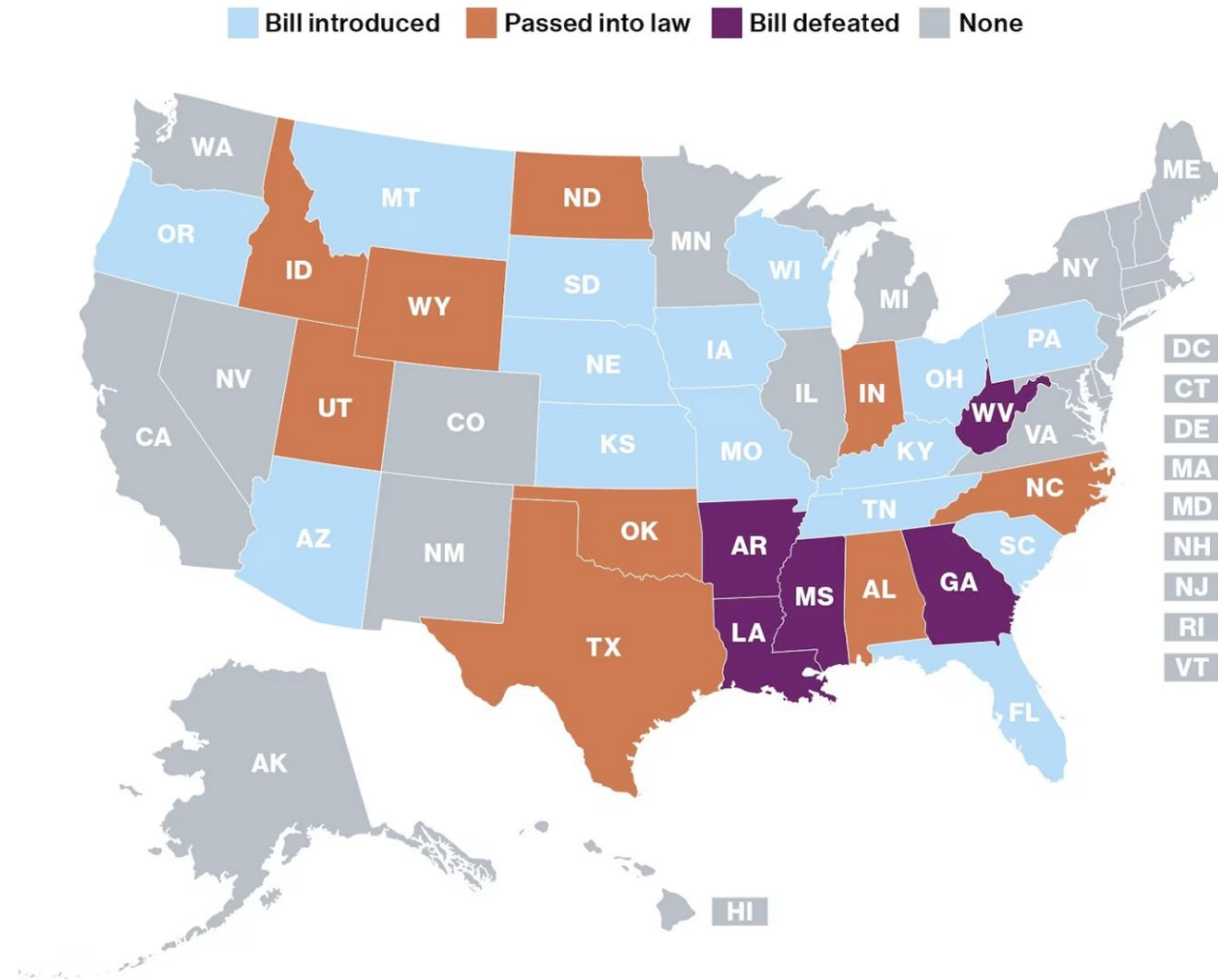
Jim Jordan, the U.S. House Judiciary Committee chairman, is investigating misinformation and disinformation researchers who have partnered with the federal government.

<https://www.insidehighered.com/news/faculty-issues/academic-freedom/2023/12/04/misinformation-research-plows-ahead-so-do>

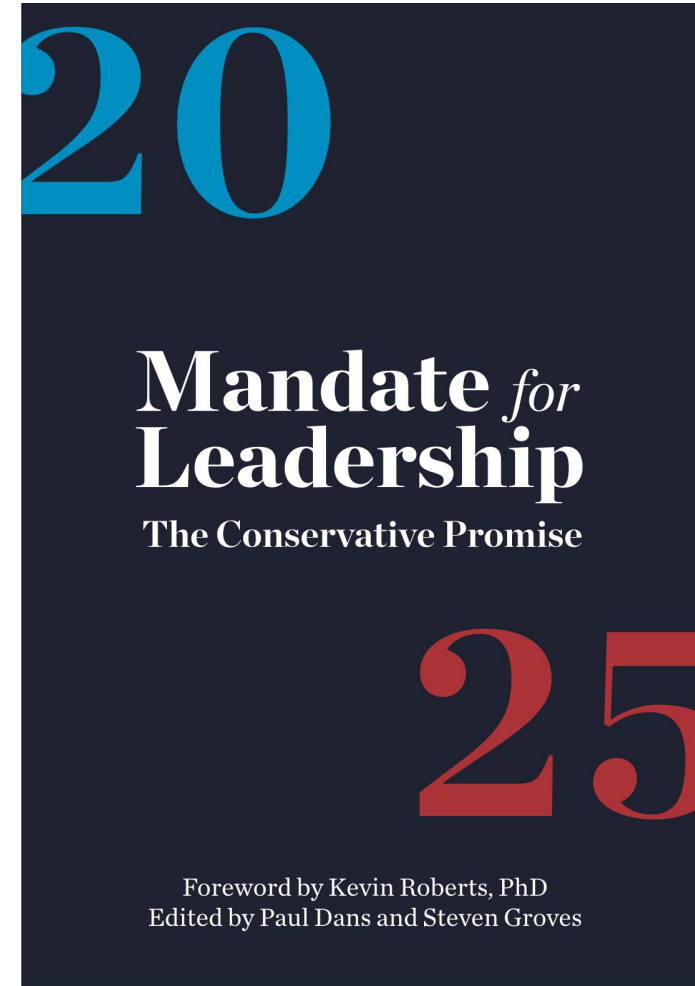


# Anti-DEI laws across the country

STATES ACROSS THE COUNTRY ARE RESTRICTING DIVERSITY EFFORTS.



# The Election...



# CRA Quadrennial Papers



The screenshot shows the CRA website's 'CRA Quadrennial Papers' page. At the top left is the CRA logo (a colorful circle) and the text 'CRA Computing Research Association'. To the right is the tagline 'Uniting industry, academia and government to advance computing research and change the world.' and social media icons for Facebook, YouTube, and RSS. Below this is a dark blue navigation bar with white text for 'ABOUT', 'GOVERNMENT AFFAIRS', 'COMMITTEES', 'PROGRAMS', 'EVENTS', 'AWARDS', 'RESOURCES', 'DATA', 'STATEMENTS/POSITIONS', 'JOBS', and a search icon. The main content area has a light blue background with a large, faint 'CRA' watermark. The title 'CRA Quadrennial Papers' is in bold blue. Below it is a paragraph explaining the purpose of the papers. To the right, under 'By Theme', are five links: 'Core Computer Science', 'Broad Computer Science', 'Socio-Technical Computing', 'Diversity & Education', and 'Artificial Intelligence'. Under 'Core Computer Science', there are two paper entries, each with a document icon in a circle, a title, authors, and a short description.

**CRA**  
Computing Research Association

Uniting industry, academia and government to advance computing research and change the world.

ABOUT GOVERNMENT AFFAIRS COMMITTEES PROGRAMS EVENTS AWARDS RESOURCES DATA STATEMENTS/POSITIONS JOBS

## CRA Quadrennial Papers

Every four years the Computing Research Association, through its subcommittees, publishes a series of white papers called Quadrennial Papers that explore areas and issues around computing research with potential to address national priorities. The white papers attempt to portray a comprehensive picture of the computing research field detailing potential research directions, challenges, and recommendations for policymakers and the computing research community. Our 2020 Quadrennial Papers cover five thematic areas: Core Computer Science, Broad Computing, Socio-Technical Computing, Diversity & Education, and Artificial Intelligence.

**By Theme**

- Core Computer Science
- Broad Computer Science
- Socio-Technical Computing
- Diversity & Education
- Artificial Intelligence

### Core Computer Science

**Post Quantum Cryptography: Readiness Challenges and the Approaching Storm**  
*Authors: Matt Campagna (Amazon), Brian LaMacchia (Microsoft Research), and David Ott (VMware Research)*

Few people are aware that each advancement we make in quantum computing brings us closer to a complete breakdown of our digital security and privacy. As quantum-driven advancements in cryptographic analysis and computing technology are achieved, the cryptographic algorithms that protect our private online information and data is threatened. This paper identifies issues that need to be addressed before the quantum transition, particularly in identifying a replacement for current cryptography algorithms and ensuring a safe transition of uses.

**Theoretical Computer Science: Foundations for an Algorithmic World**  
*Authors: Shuchi Chawla (University of Wisconsin-Madison), Jelani Nelson (UC Berkeley), Chris Umans (California Institute of Technology), and David Woodruff (Carnegie Mellon University)*

This paper presents the case for robust support of research and funding of foundational work in Theoretical Computer Science

# 2024 CRA Congressional Visits Day



September 10-11, 2024

Tues, 9/10 - Travel to DC, 1 hour of training, thank-you reception!

Wed, 9/11 - Meetings with Congressional offices that we arrange

Help us make the case for strengthening investments in fundamental computing research!

<http://cra.org/govaffairs/blog/cvds/>



# CRA/CCC Leadership in Science Policy Institute (LiSPI)



- 1.5 day workshop
- Features presentations and discussions with science policy experts, current and former Hill staff, and relevant agency and Administration personnel about mechanics of the legislative process, interacting with agencies, advisory committees, and the federal case for computing.
- Call for nominations late Fall 2024 or early Spring 2025!



## Friends of the Government Affairs Committee Email List

To join, just drop me a line at [harsha@cra.org](mailto:harsha@cra.org)!

Peter Harsha

COO and Senior Director of Government Affairs

Computing Research Policy Blog: [cra.org/blog](https://cra.org/blog)

# Game Session

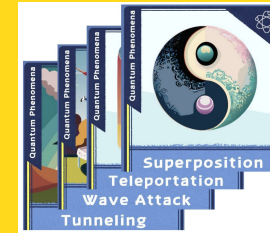
Choose a game



**Poker**



**Spades**



**Collapsing  
Qubits**

**Find the corresponding rules sheet**

**Play! Have fun!**

**Winner keeps the cards!!  
(leave unwanted cards on table)**

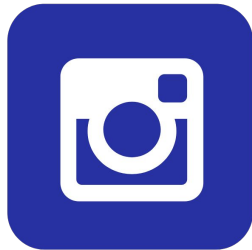


# Stay connected!

*Follow CRA on social media*



@computing-research-association



@computingresearch



@computingresearch