



University at Buffalo

Center for Information Integrity

Misinformation in Social Media and What to do About It

Friday, April 21, 2023

Buffalo Marriott Niagara

Ballroom 5

Welcome to the First Annual CII Symposium

While manipulative actors deliberately introduce false and misleading information into the media stream, much of the corrupt information circulating in the public sphere is spread inadvertently by otherwise responsible actors. Well-meaning individuals forward and re-tweet inaccurate, even downright harmful misinformation. Media platforms that would seem to have an interest in cultivating a reputation for reliability end up serving as forums for the dissemination and amplification of socially and politically destructive misinformation. Why?

This symposium explores the incentive structures facing actors in the public information ecosystem. What incentives do platforms and their users presently encounter to either allow/amplify or reduce the spread of false information, and could alterations to existing incentive structures, through regulatory intervention or through voluntary self-restraint, improve the quality of public discourse? Panels will examine platform self-regulation, regulatory influences on platform incentives, structural market incentives facing profit-seeking actors in the information economy, incentives facing individual users, and potential intervention strategies in all these areas.

About the Center for Information Integrity (CII)

CII Mission

The Center for Information Integrity (CII) provides support for collaborative research, public discussions and community outreach on mis/disinformation awareness and resilience, with a focus on these key challenges:

Understand the root causes of mis/disinformation to identify the driving forces, methods, and accelerants behind its spread, and its legal, ethical and political ramifications.

Develop multi-pronged approaches to combat mis/disinformation through robust technological and policy solutions.

Design scalable, tailored tools to combat disinformation, including training modules and innovative communication strategies focused on information and media literacy.

The Impossible Project: Learning to think at the limits of the possible, together

The Impossible Project is a learning experience that prepares students to take on grand challenges by teaching them to BEND: *Build* collective resilience, *Enhance* creative critical thinking, *Nurture* true collaboration and *Discover* purpose through dedication to social and planetary good.

IP students have worked to end discrimination, make computing antiracist and eradicate white supremacy. Please join us for a brief overview of the project's history and core principles followed by a round table discussion of our experience with the Impossible Project including how we collaborate across the humanities/STEM divide, how we work on/toward/with the impossible, and what it is like to learn in an open-ended, student-led classroom.



Dalia Antonia Caraballo Muller, PhD, is a bilingual, multi-cultural, multi-racial researcher and educator. Her twin passions are the study of the African Diaspora in Latin America and the Caribbean, and the study of transformative learning models in higher education. The through line that connects her historical work and her work in education is the concept of “impossibility.” She researches Black intellectuals in early 20th century Cuba who thought at the limits of the possible as they staked claims to rights, dignity and equality.

Respondent: Anna Lawrence is a JD candidate at University at Buffalo School of Law. Lawrence is an associate for Buffalo Human Rights Law Review. She is also currently on Trial Team, and is one of the fundraising chairs for Buffalo Public Interest Law Program.



How a Better Understanding of Uncertainty Can Help Address Misinformation

It is easy to argue that social media companies and other hosts and providers of online content should quickly identify and eliminate misinformation and disinformation. The reality, however, is more complex, as rapid identification of misinformation and disinformation can be challenging in situations where knowledge is quickly changing. This talk will argue that proposals for self-regulatory and formal regulatory frameworks to address misinformation and disinformation need be designed in a manner that better recognizes the role of uncertainty.



John Villasenor, PhD, is on the faculty at UCLA, where he is a professor of electrical engineering, public policy, law, and management as well as the faculty co-director of the Institute for Technology, Law and Policy. He is also a nonresident senior fellow at the Brookings Institution, a senior fellow at the Hoover Institution, and a member of the Council on Foreign Relations.

Villasenor's work considers the broader impacts of key technology trends, including the growth of artificial intelligence, advances in digital communications, and the increasing complexity of today's networks and systems. He writes frequently on these topics and on their implications with respect to cybersecurity, privacy, law, and business.

Respondents: E. Bruce Pitman, PhD, is a Professor in the Department of Materials Design and Innovation. The author or co-author of more than 90 research articles, he has been a principal investigator or co-investigator on approximately \$15M of research and equipment awards. An expert in mathematical modeling, for the last two decades he has been studying uncertainty quantification – techniques for understanding uncertainty in models of physical or biological systems, and how computing can account for these uncertainties.



Luke Bodmer is a first year PhD student in the Computational and Data Enabled-Sciences program at the University at Buffalo. After receiving his undergraduate degrees in physics, math, and history, from UB, he moved to Argentina where he studied medicine for two years at the Universidad Nacional de Córdoba. The Covid pandemic brought him back to the US, where he now works on computer simulations for new neuroimaging devices.

Fine. Social Media Is Bad for Us. Now What?

This project begins with an account of social media as a vice. That is, it has the two qualities that make certain goods and services vices: that they are bad for the health or wellbeing of the individuals who use them, and that despite this fact, consumers continue to want to use them (at least in the short term). There is at least some credible evidence that social media has addictive and damaging qualities. While its use is not dangerous for every person, or for any person at every time, nevertheless just as alcohol can simultaneously be a source of joy and misery depending on the context, social media may very well have a complicated and often negative impact on its users.

Next, I show that many of the other complaints about social media platforms—that they invade privacy, that they manipulate their users, or that they engage in anticompetitive practices—are either not convincing as descriptive matters or are reformulations of the vice problem. If we acknowledge that policymakers are addressing a new form of vice—something in which the consumers who are the targets of protection are also co-creators of the problem—public policy debates can be injected with some realism. After all, we have very limited policy tools in the chest that have a record of success dealing with vice. Some experiments (like prohibition and the war on drugs) caused more problems than they solved. I will attempt to lay out the strategies to reduce vice that have worked in the past, in the U.S. as well as abroad, and analyze whether we could expect similar outcomes when applied to social media. In the end, I expect to argue that taxation and government information campaigns will be the most promising, but don't count on any miracles.



Jane Bambauer, JD, is a professor of law at the University of Arizona where she teaches and studies the fundamental problems of well-intended technology policies. Prof. Bambauer's research assesses the social costs and benefits of Big Data, and how new information technologies affect free speech, privacy, and competitive markets. She also serves as the co-deputy director of the Center for Quantum Networks, a multi-institutional engineering research center funded by the National Science Foundation, where she facilitates research on economic

and regulatory policy for emerging markets in quantum technologies. Bambauer's work has been featured in over 20 scholarly publications including the *Stanford Law Review*, the *Michigan Law Review*, the *California Law Review*, and the *Journal of Empirical Legal Studies*. Her work has also been featured in media outlets including the *Washington Post*, the *New York Times*, *Fox News*, and *Lawfare*. She holds a BS in Mathematics from Yale College and a JD from Yale Law School.

Respondents:

James Gardner, JD, is Bridget and Thomas Black SUNY Distinguished Professor at UB School of Law. Gardner is a highly regarded specialist in constitutional and election law. He is a prolific scholar who has published six books and more than 60 articles and book chapters. According to Election Law Blog and Brian Leiter's Law School Reports, Gardner is the 8th most frequently cited scholar in the field of election law.



Jennifer Surtees, PhD, explores mechanisms of genome stability, the many and varied pathways that protect the integrity of genomes. Surtees believes that scientists have a responsibility to communicate clearly with the public as discoveries push the boundaries of knowledge and technology in biology. She serves as co-director of the Genome, Environment and Microbiome (GEM) Community of Excellence at UB, which advances understanding of the genome and microbiome and their interaction with the environment through research, education, community programs and art.

Samantha Barbas, JD, PhD, researches and teaches in the areas of legal history, First Amendment law and mass communications law. Her work focuses on the intersection of law, culture, media and technology in United States history. Her recent research has explored the history of censorship, privacy and defamation.



Tackling Disinformation in the Classroom: Creating an Inclusive Space Where Students' Interests, Confidence, and Public Participation in Knowledge Production Intersect

The data is clear. The proliferation of Deepfakes, fake news, fake datasets, and even fake academic journals makes it harder to trust the information we encounter online. While well-researched answers to questions with myriad citations are always out there, so are extra deliciously convincing conspiracy theory clickbait. Now more than ever, college faculty and students need opportunities to develop digital literacy skills that help us decipher and interrogate the maelstrom of information we encounter daily.

While you may not consider Wikipedia the exact right tool for this complex job, the late Erik Olin Wright, former President of the American Sociological Association was a fan. In 2011, he famously called Sociologists to action on Wikipedia calling it a “real utopia” that “embodied ideals of equality, open access, participation, and deliberation in a domination-free environment.”

In 2016, I founded an innovative misinformation-combating approach which incorporates the ideals of discovery education and thanks to Wiki Education is accessible to any faculty member anywhere. In six short years, hundreds of affiliated students have led the rapid expansion of publicly available information on privacy, cybersecurity, and surveillance on Wikipedia using my approach. The privacy literacy program teaches students how to actively counter misinformation using the firewalled peer-reviewed articles already available at their fingertips. Lab affiliates have written or edited articles receiving over 241 million views using information unavailable to the public. All told, we are one of the top three academic initiatives editing Wikipedia in the world and are composed of mostly women who are also people of color. And what if I told you my research suggests you can use this model with other topics? Imagine what you and your students could do in just one or two hours a week to actively elevate public discourse and stifle misinformation. This panel will introduce you to the work of the Coleman Research Lab via the experiences of its founder and its incredible students.



Naniette H. Coleman is a PhD candidate in Sociology at the University of California Berkeley and a multi-year UC-National Laboratory Graduate Fellow (Los Alamos). She is the only social scientist selected for this distinction in the history of the program.

Coleman’s work sits at the intersection of the sociology of culture and organizations and focuses on cybersecurity, surveillance, and privacy in the US context. Specifically, Coleman’s research examines how organizations assess risk, make decisions,

and respond to data breaches and organizational compliance with state, federal, and international privacy laws.

Coleman is the recipient of numerous academic and professional service honors including the K. Patricia Cross Future Leaders Award from the American Association of Colleges & Universities, Berkeley Chancellor's Award for Public Service, SUNY Chancellor's Award for Excellence, Alumni Public Sociology Award, Presidential Management Fellowship, and President's Life-time Volunteer Service Award. Current academic and professional service commitments include founding and leading the first Summer Institute in Computational Social Science at a Historically Black College or University, SICSS-Howard/Mathematica 2021 and sitting on the Board of Trustees for ScienceCounts. Coleman holds a Master of Public Administration with a specialization in Democracy, Politics, and Institutions from the Harvard Kennedy School of Government, and both an M.A. in Economics and a B.A. in Communication from the University at Buffalo, SUNY. A non-traditional student, Coleman's prior professional experience includes local, state, and federal service, as well as work for two international organizations, and two universities.

Panelists:



Maddy Chen is a fourth-year undergraduate student studying Computer Science at the University of California, Berkeley and minoring in Chinese Language. Since joining in Fall 2020, Maddy has served as a research assistant, project lead, and lab manager in the Interdisciplinary Research Group on Privacy. Maddy plans to pursue a career in software engineering after graduation, and in her free time, enjoys playing volleyball and crocheting.



Frankie Colosimo is currently a third year medical student at the Kirk Kerkorian School of Medicine in Las Vegas, Nevada. She received her BA in Psychology from the University of California, Berkeley in 2020. Frankie began working for the Interdisciplinary Research Group on Privacy (IRGP) as a research assistant her sophomore year then as lab manager for the remainder of her time at University of California, Berkeley. She maintains close ties to the lab through various writing projects focused on medical adjacent topics. In her limited free time, Frankie enjoys reading, gardening, and collecting vinyl albums.



Savannah Cragin works with the CCCC Wikipedia Initiative, bringing with her several years of Wikipedia editing and teaching experience. She has worked alongside the Interdisciplinary Research Group on Privacy (IRGP) at the University of California, Berkeley to increase awareness of cybersecurity and surveillance issues on Wikipedia as both an Undergraduate Research Fellow and Wikipedia Coordinator.

Additionally, she has worked with the American Cultures Center at UCB as a Wikipedia Peer Fellow to assist instructors with Wikipedia-based assignments.



Ankita Janakiraman is a current senior at the University of California, Berkeley studying Data Science and Cognitive Science. She first joined the Interdisciplinary Research Group on Privacy in June 2020 and worked on the Privacy Literacy Project before joining the lab leadership team in August 2020 until June 2021. She is passionate about telling stories with data, making data-driven decisions, and creating more transparency with individuals about their data use. After graduating, she hopes to start her career in the tech industry and continue to pursue her interest in research.



Vinaya Parimi is a third-year undergraduate student studying Computer Science and Economics at the University of California, Berkeley. In her time at the Interdisciplinary Research Group on Privacy, Vinaya worked on bridging the knowledge and data gaps regarding privacy and cybersecurity in the language of Telugu. In her free time Vinaya likes to find new recipes to cook or paint and post-graduation, Vinaya is planning on pursuing a career in Investment Banking.



Ash Tan is a data analyst for digital strategy at Pew Research Center. He received a Master of Information and Data Science from the UC Berkeley School of Information, and received a Bachelor of Arts in Data Science and a Bachelor of Arts in Cognitive Science from UC Berkeley. Ash participated in the Interdisciplinary Research Group on Privacy (IRGP) first as a research assistant specializing in Neuroprivacy and subsequently as a data analyst for the IRGP leadership team.



Ava Wu received her Bachelor of Arts in French and Molecular & Cell Biology from the University of California, Berkeley. Ava served as a research assistant and project lead in the Interdisciplinary Research Group on Privacy, focusing on bridging knowledge gaps across languages and cultures. She continues to support the research group, curating social media and video content for the Summer Institute in Computational Social Science-Howard/Mathematica. Outside of the lab, Ava is a paralegal at an international law firm with plans to pursue a JD. In her free time, she is learning Modern Greek and Mandarin Chinese.

Misinformation & Extremism



Moderator: Yotam Ophir, PhD, studies media effects, persuasion, misinformation, conspiracy theories and extremism. His work combines computational methods for text mining, network analysis, experiments and surveys to study media content and effects in the areas of political, science, and health communication.

Ophir is the head of the Media Effects, Misinformation, and Extremism (MEME) lab at the University at Buffalo, a member of the Center for Information Integrity (CII) at the University at Buffalo, and a distinguished fellow at the Annenberg Public Policy Center at the University of Pennsylvania

Panelists:



Lindsay Hahn, PhD, researches the cognitive processes surrounding media influence in audiences across the lifespan. Taking an approach rooted in evolutionary psychology, Dr. Hahn investigates how exposure to entertainment and news media can shape the extent to which people make judgments and/or adopt behaviors that might be considered beneficial or detrimental to themselves or society. She is particularly interested in examining these processes in socially important populations, leading her work to uniquely focus on the role of entertainment media as a contributing factor in children's moral and self-centered behaviors and, separately, the extent to which appeals to morality can be an effective tool for radicalizing individuals to join or act on behalf of violent extremist groups. Hahn directs the Media Psychology and Morality Lab at UB. She is also an affiliate with the Center for the Science of Moral Understanding.



Matt Kenyon, MFA, is a new media sculptor who lives and works in Buffalo, N.Y. His studio, S.W.A.M.P. (Studies of Work Atmospheres and Mass Production) focuses on critical themes addressing the effects of global corporate operations, mass media and communication, military-industrial complexes, and general meditations on the liminal area between life and artificial life.

Kenyon's work has been exhibited internationally and collected by institutions including the Museum of Modern Art in New York. It has received a number of awards including the distinguished FILE Prix Lux Art prize. Reproductions of SWAMP's work have been featured in mainstream publications such as Wired and Gizmodo, and also appear in edited volumes such as A Touch of Code (Gestalten Press) and Adversarial Design (MIT Press).

Kenyon is a 2015 TED fellow and a Macdowell fellow. He was recently selected for Coolhunting's CH25, a showcase of creators and innovators from a broad range of disciplines who are currently working to drive the world forward.



Mark G. Frank, PhD, is an internationally recognized expert on human nonverbal communication, emotion, and deception. Dr. Frank conducts research and does training on micro expressions of emotion and of the face. His research studies include other nonverbal indicators of deception throughout the rest of the body.

He is the Director of UB's Communication Science Center research laboratory. Under his guidance, a team of graduate researchers conducts experiments and studies for private and government entities. Frank uses his expertise in communication and psychology to assist law enforcement agencies in monitoring both verbal and nonverbal communication.



Yini Zhang, PhD, uses computational methods and big data to study social media and political communication. Her current research program centers around three questions: 1) within social media, how people express themselves and interact with each other, 2) as an ecosystem, how social media platforms relate to one another in terms of the flow of information, and 3) beyond social media, what can influence and be influenced by communication and interaction on social media. She also collaborates with experts in other disciplines to pose new questions and develop new methods to advance communication research.

Center for Information Integrity's Vision

Mis/disinformation is one of the most serious threats to civil society and democracy that we face both in the United States and globally. Our limited capability to check the creation and spread of mis/disinformation leaves us powerless to prevent the significant harm it causes. No single approach - neither technological advances nor new regulations - can curb the negative impact of mis/disinformation on its own.

Technical solutions will always be temporary since malicious actors will find ways to circumvent them. Democratic governments have limited ability to curtail mis/disinformation, and ethical and political questions arise around the desirability to allocate remedial responses to government institutions. We need socio-technological solutions that can address root causes and balance the rights to privacy and free speech, along with partnerships with community and other stakeholders to address public health and social justice concerns.

CII brings together nationally-renowned faculty from across academic disciplines—computer and data science, communications and linguistics, law and political science, medicine and public health, learning and information sciences, geography and psychology, and the humanities—to identify, evaluate, and mitigate the impact of mis/disinformation in key areas of public life, including public health (e.g., vaccine hesitancy) climate change, and the integrity of democratic processes.



Schedule

- 8:00AM Continental Breakfast
- 9:00AM Impossible Project Panel - Dalia Antonia Caraballo Muller & students
- 10:30AM Break
- 10:45AM How a Better Understanding of Uncertainty Can Help Address Misinformation - John Villasenor
- 12:15PM Lunch
- 1:00PM Fine. Social Media Is Bad for Us. Now What? - Jane Bambauer
- 2:30PM Break
- 2:45PM Tackling Disinformation in the Classroom: Creating an Inclusive Space Where Students' Interests, Confidence, and Public Participation in Knowledge Production Intersect - Naniette Coleman & students
- 4:15PM Break
- 4:30PM Misinformation & Extremism—A panel discussion
Moderated by Yotam Ophir Panelists: Lindsay Hahn, Matt Kenyon, Mark Frank, and Yini Zhang
- 6:00PM Happy Hour