cv/ Cody Buntain, PhD

College of Information Studies, University of Maryland 14 March 2024

RESEARCH FOCUS

Today's information ecosystem has the potential to connect us and keep us informed. It is not living up to that potential. I study how we can leverage AI and sociotechnical solutions to bridge this gap and make these spaces more informative, higher-quality, and more resilient to manipulation.

Information Quality, Online Political Communication, AI, Crisis informatics

ACADEMIC APPOINTMENTS

2022–Present University of Maryland, College Park, MD

Assistant Professor, College of Information Studies, Affiliate Appointment in UMIACS

2019–Present New York University, New York, NY

Affiliate, Center for Social Media and Politics

2019–2021 New Jersey Institute of Technology, Newark, NJ

Assistant Professor, Department of Informatics

2018–2019 New York University, New York, NY

Postdoctoral Researcher, Social Media and Political Participation Lab (with Joshua A. Tucker,

Jonathan Nagler, Richard Bonneau)

2017–2018 University of Maryland, College Park, MD

Adjunct Faculty, College of Information Studies

2016–2018 University of Maryland, College Park, MD

Intelligence Community Postdoctoral Fellow, START Center and College of Information Studies

2015 American University, Washington, DC

Adjunct Faculty, Computer Science Department

EDUCATION

2016 **PhD in Computer Science**, University of Maryland, College Park, MD

Advisor: Professor Jennifer Golbeck

Dissertation: Discovering Credible Events In Near Real Time From Social Media Streams

Committee: Professor Jimmy Lin, Professor Nicholas Diakopoulos, Professor Hector Corrada Bravo, Professor

V.S. Subrahmanian

2010 MS in Computer Science, University of Alabama in Huntsville, Huntsville, AL

Thesis: A Game-Theoretic Comparison Of Genetic And Model-Based Agents In Learning Strategic In-

teractions

Advisor: Professor Daniel Rochowiak

2007 BS in Computer Science and Mathematics, University of Alabama in Huntsville,

Huntsville, AL

Honors: Summa Cum Laude

RELEVANT EMPLOYMENT BACKGROUND

2019-Present President and Chief Research Scientist, Bunta.in LLC, Bethesda, MD

2021–2024 Subject Matter Expert, Giant Oak, Inc., Arlington, VA

2011–2014 Research Scientist, Raytheon Pikewerks, Arlington, VA

2009–2011 Director of Research, Pikewerks Corporation, Madison, AL

2008–2009 Research Engineer, Pikewerks Corporation, Madison, AL

CENTERS FOR RESEARCH AND CREATIVE SCHOLARSHIP

2023-Present Co-Director of Education and Workforce Development, Trustworthy AI Institute for Law

and Society (TRAILS), https://www.trails.umd.edu/

2021-Present Co-Founder of the Center for AI, Data, and Conflict, UMD and the University of Regina,

http://caidac.org

FELLOWSHIPS

Fellowship: Intelligence Community Postdoctoral Fellowship Institution: Office of the Director of National Intelligence

Date: 2016-2018

Fellowship: OSDC-PIRE Fellowship

Institution: University of Amsterdam and Florida International University

Date: 2014

AWARDS AND HONORS

o Maryland Research Excellence Nominee, UMD, 2023 2024

- o Outstanding Reviews, CSCW 2020, 2021
- o Best Reviewer, ICWSM 2019, 2020
- o Outstanding PC, WSDM 2020, February 2020
- o Best Paper Award, IEEE SmartCloud 2017, November 2017
- O SIGIR Student Grant, April 2016
- o Best Paper Honorable Mention, #Microposts2016, April 2016
- o Goldhaber Awards, March 2014 and April 2015
- o International Conference Student Awards, February 2014 and April 2015
- o UMD HCIL Conference Award, March 2015
- o Computer Science Department Gannon Award, February 2014

PUBLICATIONS

REFEREED JOURNAL PUBLICATIONS

- [j13] Hemant Purohit, Cody Buntain, Amanda Hughes, Steve Peterson, Valerio Lorini, Carlos Castillo. (2025). Engage and Mobilize! Understanding Evolving Patterns of Social Media Usage in Emergency Management. In the Proceedings of the ACM Human Computer Interaction, presented at CSCW 2025. forthcoming.
- [j12] Brian McQuinn, Marcus Kolga, **Cody Buntain**, and Laura Courchesne. (2024). Russia Weaponization of Canada's far Right and far Left to Undermine Support for Ukraine. International Journal. https://doi.org/10.1177/00207020241257635
- [j11] Susannah B. F. Paletz, Michael A. Johns, Egle E. Murauskaite, Ewa M. Golonka, Nick B. Pandža, C. Anton Rytting, Cody Buntain and Devin Ellis. (2023). Emotional content and sharing on Facebook: A theory cage match, Sci. Adv. 9, eade9231 (2023). DOI:10.1126/sciadv.ade9231.
- [j10] Susannah B. F. Paletz, Ewa M. Golonka, Nick B. Pandža, Grace Stanton, David Ryan, Nikki Adams, C. Anton Rytting, Egle E. Murauskaite, Cody Buntain, Michael A. Johns and Petra Bradley. (2023). Social media emotions annotation guide (SMEmo): Development and initial validity, In Behavior Research Methods. https://doi.org/10.3758/s13428-023-02195-1

- [j9] Cody Buntain, Martin Innes, Tamar Mitts, and Jacob Shapiro. (2023). Cross-Platform Reactions to the Post-January 6 Deplatforming, In the Journal of Qualitative Description: Digital Media, 3.
- [j8] Cody Buntain, Monique D. Barlow, Mia Bloom, Mila A. Johns. (2022). Paved with Bad Intentions: QAnon's Save the Children Campaign, In the Journal of Online Trust and Safety, 1 (2).
- [j7] Cody Buntain, Richard Bonneau, Jonathan Nagler, and Joshua A. Tucker. (2021). YouTube Recommendations and Effects on Sharing Across Online Social Platforms, In the Proceedings of the ACM – Human Computer Interaction, presented at CSCW 2021
- [j6] Meysam Alizadeh, Jacob Shapiro, Cody Buntain, and Joshua A. Tucker. (2020). Content-Based Features Predict Social Media Influence Operations, Science Advances. https://doi.org/10. 1126/sciadv.abb5824
- [j5] George Mohler, Erin McGrath, Cody Buntain, and Gary LaFree. (2020). Hawkes Binomial Topic Model with Applications To Coupled Conflict-Twitter Data, Annals of Applied Statistics 14 (4). https://doi.org/10.1214/20-AOAS1352
- [j4] Yevgeniy Golovchenko, Cody Buntain, Gregory Eady, Megan Brown, and Joshua A. Tucker. (2020). Cross-Platform State Propaganda: Russian Trolls on Twitter and YouTube During the 2016 US Presidential Election, in the International Journal of Press/Politics. https://doi.org/ 10.1177/1940161220912682
- [j3] John Brandt, Kathleen Buckingham, **Cody Buntain**, Will Anderson, Sabin Ray, John-Rob Pool, and Natasha Ferrari. (2020). Identifying social media user demographics and topic diversity with computational social science: a case study of a major international policy forum. In the Journal of Computational Social Science. https://doi.org/10.1007/s42001-019-00061-9
- [j2] **Cody Buntain**, Jungkyu Rhys Lim. (2018). #pray4victims: Consistencies In Response To Disaster on Twitter. In the Proceedings of the ACM Human-Computer Interaction, presented at CSCW, 2018. https://doi.org/10.1145/3274294 **Honorable Mention Award**
- [j1] **Cody Buntain** and Jennifer Golbeck. (2015). Trust Transfer Between Contexts, in the Journal of Trust Management, 2, 6. https://doi.org/10.1186/s40493-015-0017-1

HEAVILY REVIEWED CONFERENCE PROCEEDINGS

- [c29] Amogh Joshi and Cody Buntain, "Examining Similar and Ideologically Correlated Imagery in Online Political Communication," in International AAAI Conference on Web and Social Media (ICWSM 2024), Buffalo, NY, USA, June, 2024. https://doi.org/10.1609/icwsm.v18i1. 31351
- [c28] Cody Buntain, Richard Bonneau, Jonathan Nagler, Joshua A. Tucker. (2023). Measuring the Ideology of Audiences for Web Links and Domains Using Differentially Private Engagement Data, in Proceedings of the International AAAI Conference on Web and Social Media (ICWSM 2023), Cyprus, June, 2023. https://doi.org/10.1609/icwsm.v17i1.22127. Best Evaluation Paper Award.
- [c27] Richard McCreadie, Cody Buntain. (2023). CrisisFACTS: Building and Evaluating Crisis Timelines, in 20th International Conference on Information Systems for Crisis Response and Management (ISCRAM 2023), Omaha, NB, USA, 2023.
- [c26] Matthew Childs, Cody Buntain, Milo Trujillo, Benjamin D. Horne. (2022). Characterizing YouTube and BitChute Content and Mobilizers During U.S. Election Fraud Discussions on Twitter, in Proceedings of the International ACM Web Science Conference (WebSci'22), Barcelona, Spain, June, 2022.
- [c25] Milo Trujillo, Mauricio Gruppi, Cody Buntain, Benjamin D. Horne. (2022). The MeLa BitChute Dataset, in Proceedings of the International AAAI Conference on Web and Social Media (ICWSM 2022), Atlanta, GA, USA, June, 2022.

- [c24] Cody Buntain, Richard McCreadie, Ian Soboroff. (2022). Incident Streams 2021 Off the Deep End: Deeper Annotations and Evaluations in Twitter, in Proceedings of the 19th International Conference on Information Systems for Crisis Response and Management (ISCRAM 2022), Tarbes, France, May, 2022.
- [c23] Pooneh Mousavi, Cody Buntain. (2022). "Please Donate for the Affected": Supporting Emergency Managers in Finding Volunteers and Donations in Twitter Across Disasters, in Proceedings of the 19th International Conference on Information Systems for Crisis Response and Management (ISCRAM 2022), Tarbes, France, May, 2022.
- [c22] Shivam Sharma, Cody Buntain. (2022). Bang for your Buck: Performance Impact Across Choices in Learning Architectures for Crisis Informatics, in Proceedings of the 19th International Conference on Information Systems for Crisis Response and Management (ISCRAM 2022), Tarbes, France, May, 2022.
- [c21] Shivam Sharma, Cody Buntain. (2021). An Evaluation of Twitter Datasets from Non-Pandemic Crises Applied to Regional COVID-19 Contexts, in Proceedings of the 18th International Conference on Information Systems for Crisis Response and Management (ISCRAM 2021), Blacksburg, VA, USA, May, 2021.
- [c20] Cody Buntain, Richard McCreadie, Ian Soboroff. (2021). Incident Streams 2020: TREC-IS in the Time of COVID-19, in Proceedings of the 18th International Conference on Information Systems for Crisis Response and Management (ISCRAM 2021), Blacksburg, VA, USA, May, 2021. Best Paper Award
- [c19] Milo Trujillo, Maurício Gruppi, **Cody Buntain**, and Benjamin Horne. (2020). What is BitChute? Characterizing the "Free Speech" Alternative to YouTube, in Proceedings of the 31st ACM Conference on Hypertext and Social Media. https://doi.org/10.1145/3372923.3404833
- [c18] Richard McCreadie, Cody Buntain, Ian Soboroff, Incident Streams 2019: Actionable Insights and How to Find Them, in Proceedings of the 17th International Conference on Information Systems for Crisis Response and Management (ISCRAM 2020), Blacksburg, VA, USA, May, 2020. Best Paper Nominee
- [c17] Richard McCreadie, Cody Buntain, Ian Soboroff. (2019). TREC Incident Streams: Finding Actionable Information on Social Media, in Proceedings of the 16th International Conference on Information Systems for Crisis Response and Management (ISCRAM 2019), Valencia, Spain.
- [c16] Brooke Auxier, Cody Buntain, Paul Jaeger, Jennifer Golbeck, Hernisa Kacorri, #Hand-sOffMyADA: A Twitter Response to the ADA Education and Reform Act, in Proceedings of the ACM Conference on Human Factors in Computing Systems (CHI 2019), Glasgow, Scotland, May, 2019.
- [c15] Cody Buntain, Jennifer Golbeck, Brooke Auxier, Biniyam Girum Assefa, Karen Boyd, Kristen Byers, Gursimran Chawla, Daniel Chen, Benjamin Cooper, Jake Cupani, Clay Daetwyler, Nicholas DeWitt, Suzanne Garcia, Christine Hafer, Misbah Khan, Elo Lewis, Marianna Martindale, Analyzing a Fake News Authorship Network, in Proceedings of the 2019 iConference, College Park, MD, March, 2019.
- [c14] Brooke Auxier, Cody Buntain, Jennifer Golbeck, Analyzing sentiment and themes in fitness influencers' Twitter dialogue, in Proceedings of the 2019 iConference, College Park, MD, March, 2019.
- [c13] Jennifer Golbeck, Cody Buntain, This Paper Is About Lexical Propagation on Twitter. H*ckin smart. 12/10. Would accept!, in Proceedings of the ACM/IEEE International Conference on Advances in Social Networks Analysis and Mining (ASONAM), Barcelona, Spain, 2018.
- [c12] Matthew Louis Mauriello, Brenna McNally, Cody Buntain, Sapna Bagalkotkar, Samuel Kushnir, and Jon E Froehlich, A Large-Scale Analysis of YouTube Videos Depicting Everyday Thermal Camera Use, in Proceedings of the ACM International Conference on Human-Computer Interaction with Mobile Devices and Services (MobileHCI), 2018.

- [c11] Jennifer Golbeck, Matthew Mauriello, Brooke Auxier, Keval H Bhanushali, Christopher Bonk, Mohamed Amine Bouzaghrane, Cody Buntain, Riya Chanduka, Paul Cheakalos, Jeannine B. Everett, Waleed Falak, Carl Gieringer, Jack Graney, Kelly M. Ho man, Lindsay Huth, Mayanka Jha, Misbah Khan, Varsha Kori, Elo Lewis, George Mirano, William T. Mohn IV, Sean Mussenden, Tammie M. Nelson, Sean Mcwillie, Akshat Pant, Priya Shetye, Rusha Shrestha, Alexandra Steinheimer, Aditya Subramanian, Gina Visnansky, Fake News vs. Satire: A Dataset and Analysis, in Proceedings of the 10th International ACM Web Science Conference (Web-Sci'18), 2018.
- [c10] Cody Buntain, Erin McGrath, and Brandon Behlendorf, Improving Social Science-Oriented Search with Microblog Data Resellers and Network Analysis, in Proceedings of the 51st Annual Hawaii International Conference on System Sciences (HICSS), 2018.
 - [c9] Cody Buntain, and Jennifer Golbeck, Automatically Identifying Fake News in Popular Twitter Threads, In Proceedings of the 1st IEEE SmartCloud Conference, 2017. (Best Paper Award)
 - [c8] Jennifer Golbeck, Zahra Ashktorab, Rashad O Banjo, Alexandra Berlinger, Siddharth Bhagwan, Cody Buntain, Paul Cheakalos, Alicia A Geller, Quint Gergory, Rajesh Kumar Gnanasekaran, Raja Rajan Gunasekaran, Kelly M Hoffman, Jenny Hottle, Vichita Jienjitlert, Shivika Khare, Ryan Lau, Marianna J Martindale, Shalmali Naik, Heather L Nixon, Piyush Ramachandran, Kristine M Rogers, Lisa Rogers, Meghna Sardana Sarin, Gaurav Shahane, Jayanee Thanki, Priyanka Vengataraman, Zijian Wan, Derek Michael Wu, A Large Labeled Corpus for Online Harassment Research, in Proceedings of the 9th International ACM Web Science Conference (WebSci'17), 2017.
 - [c7] Cody Buntain, and Jimmy Lin, Burst Detection in Social Media Streams for Tracking Interest Profiles in Real Time, in Proceedings of the 39th Annual International ACM SIGIR Conference on Research and Development in Information Retrieval (SIGIR 2016), pages 777-780, July 2016, Pisa, Italy.
 - [c6] Cody Buntain, Jennifer Golbeck, Brooke Liu, and Gary LaFree, Evaluating Public Response to the Boston Marathon Bombing and Other Acts of Terrorism through Twitter, in Proceedings of the International AAAI Conference on Web and Social Media, 2016.
 - [c5] **Cody Buntain**, Jimmy Lin, and Jennifer Golbeck, Learning to Discover Key Moments in Social Media Streams, in Proceedings of the IEEE Consumer Communications and Networking Conference, 2016.
 - [c4] Cody Buntain, Sarit Kraus, and Amos Azaria, Leveraging Fee-Based, Imperfect Advisors in Human-Agent Games of Trust, in Proceedings of the Twenty-Eighth Conference on Artificial Intelligence, 2014.
 - [c3] Cody Buntain, Jennifer Golbeck, Dana Nau, and Sarit Kraus, Advice and trust in games of choice, in Tenth Annual International Conference on Privacy, Security and Trust (PST), 2012, pp. 157–158.
 - [c2] John Rushing, Todd Berendes, Hong Lin, Cody Buntain, and Sara Graves, Spyglass: A system for ontology based document retrieval and visualization, 22nd International FLAIRS Conference, 2009
 - [c1] Cody Buntain, 3D ontology visualization in semantic search, in Proceedings of the 46th Annual Southeast Regional Conference of the ACM, 2008, pp. 204–208.

CHAPTERS IN BOOKS

- [b2] Elissa M. Redmiles, **Cody Buntain**, How Feelings of Trust, Concern, and Control of Personal Online Data Influence Web Use, in Handbook of Digital Inequality, Eszter Hargittai (ed.) Edward Elgar Publishing, in press.
- [b1] **Cody Buntain**, Characterizing Gender Differences in Misogynistic and Antisocial Microblog Posts (2018), in Online Harassment, Jennifer Golbeck (ed.) London, UK: Springer.

REFEREED WORKSHOPS

- [w14] Keng-Chi Chang and Cody Buntain, "Characterizing Image Sharing Behaviors in US Politically Engaged, Random, and Demographic Audience Segments", in PhoMemes 2023: A Workshop on Images in Online Political Communication at ICWSM, 2023. https://doi.org/10.36190/2023.31
- [w13] Amogh Joshi and Cody Buntain, "Exploiting the Right: Inferring Ideological Alignment in Online Influence Campaigns Using Shared Images," in PhoMemes 2022: A Workshop on Images in Online Political Communication at ICWSM, 2022.
- [w12] Cody Buntain and Amy K. Hoover, "Diversifying Automated Decision Support for Content Moderation," in the Workshop on Moderation Research at CSCW, 2019.
- [w11] **Cody Buntain**, "Studying National Trends in Drug Use with Social Media," in the Workshop on Social Media and Demographics Research at ICWSM, 2018.
- [w10] **Cody Buntain**, Erin McGrath, and Jennifer Golbeck, "Tracking Emigration from Conflict Areas using Social Media," in the Workshop on Social Media and Demographics Research at ICWSM, 2016.
- [w9] **Cody Buntain**, Erin McGrath, Jennifer Golbeck, and Gary LaFree, "Comparing Social Media and Traditional Surveys Around the Boston Marathon Bombing," in 6th Workshop on Making Sense of Microposts (#Microposts 2016), 2016. (**Best Paper Honorable Mention**)
- [w8] **Cody Buntain**, Jennifer Golbeck, and Gary LaFree, "Powers and Problems of Integrating Social Media Data with Public Health and Safety," in the Proceedings of the Bloomberg Data for Good Exchange, 2015.
- [w7] **Cody Buntain**, "Discovering Credible Events in Near Real Time from Social Media Streams," in PhD Symposium, 24th International World Wide Web Conference, WWW '15, 2015.
- [w6] **Cody Buntain** and Jennifer Golbeck, "This is your Twitter on drugs. Any questions?," in Workshop on Modeling social media: mining big data in social media and the web (MSM 2015), in 24th International World Wide Web Conference, WWW '15, 2015.
- [w5] **Cody Buntain**, Language-Agnostic Event Detection Across Sports from Twitter and Using Temporal Features, in Workshop on Large Scale Sports Analytics, KDD, 2014.
- [w4] Cody Buntain and Jennifer Golbeck, Trust Transfer Between Contexts, in Proceedings of the Workshop on Incentives and Trust in E-Communities, AAAI, 2014.
- [w3] **Cody Buntain** and Jennifer Golbeck, Social Roles in Multi-Community Websites, in Proceedings of the 5th International Workshop on Modeling Social Media, 2014.
- [w2] Cody Buntain, Christopher Natoli, and Miroslav Živković, Comparing algorithms for detecting abrupt change points in data, in Proceedings of the 2014 Conference on Super Computing, November 2014.
- [w1] Nadya Belov, Jason Schlachter, Cody Buntain, and Jennifer Golbeck, Computational trust assessment of open media data, 2013 IEEE International Conference on Multimedia and Expo Workshops (ICMEW), 2013.

INVITED CONTRIBUTIONS

[i1] **Cody Buntain** (2022). An Imperative to Assess Socio-Technical Impact of Algorithms in Online Spaces and Wresting Responsibility from Technology Companies. 2022 IEEE 8th International Conference on Collaboration and Internet Computing (CIC), Atlanta, GA, USA, 2022, pp. 45-54, doi: 10.1109/CIC56439.2022.00017.

CHAIRED PANELS

- [p5] Susan Aaronson, David Broniatowski, Cody Buntain. "AI and Data Collection", Data Governance in the Age of Generative AI Symposium, Washington, DC. December 2023.
- [p4] Cody Buntain, Ewa Syta. "Resilience And Security In The Information Ecosystem", National Academy of Engineers 2023 Grainger Foundation Frontiers of Engineering Symposium, Boulder, CO. September 2023.

- [p3] Cody Buntain, Jungseok Joo, Dhavan Shah, Erik Bucy, Navin Kumar, and Keng-Chi Chang. "PhoMemes 2023: Second Workshop on Images in Online Political Communication," Co-Located with ICWSM 2023, Cyprus. June 2023.
- [p2] Cody Buntain, Jungseok Joo, Andreu Casas, Zacharcy Steinert-Threlkeld, Dhavan Shah, and Erik Bucy. "PhoMemes 2022: A Workshop on Images in Online Political Communication," Co-Located with ICWSM 2022, Atlanta, GA. June 2022.
- [p1] Cody Buntain, Amudha Shankar, David Broniatowski, Kathleen Carley, and Richard Mc-Creadie. "Information Quality and Credibility," in the European Commission, Joint Research Committee, Workshop on Disaster Risk Management, 2020.

OTHER PUBLICATIONS, PRESENTATIONS, WORKSHOPS, AND DEMOS

- [011] **Cody Buntain**, Benjamin Horne, Amanda Hughes, Muhammad Imran, Richard McCreadie, Hemant Purohit. CrisisFACTS: Crisis Facts and Cross-Stream Temporal Summarization Track at TREC 2023, November, 2023. http://crisisfacts.github.io
- [o10] Martin Smyth, Joseph Finn, Cody Buntain, Joshua Garland, Andrés Rodriguez, Alex Cloninger, Modeling Social Media Networks as Hyperbolic Random Graphs, in the Networks 2021 Conference, July, 2021.
- [09] **Cody Buntain** and Ruizhe Fan, Using Politicians' Online Behaviors as Embeddings in Bipartite Networks to Infer Political Ideology, in the Networks 2021 Conference, July, 2021.
- [08] **Cody Buntain** and Megan Resurreccion, Topics of COVID-19 Vaccines and Categories of Misinformation, in the North American Social Networking Conference, January, 2021.
- [o7] Martin Smyth, Cody Buntain, Debra Dwyer, Joseph Finn, Jason Jones, Joshua Garland, and Michael Egan, Information Processing on Social Media Networks as Emergent Collective Intelligence, in the ACM Conference on Collective Intelligence, June, 2020.
- [06] Cody Buntain, Vishakh Padmakumar, Richard Bonneau, Jonathan Nagler, and Joshua A. Tucker, Artificial Dissimilarity: Multi-Modal Content Similarities in Online Disinformation Campaigns, in the ACM Conference on Collective Intelligence, June, 2020.
- [05] Cody Buntain and Joshua A. Tucker, Analyzing Link Sharing Across Platforms to Study Political Messaging and Ideology, in the Preconference on Politics And Computational Social Science (PACSS), Washington, DC, August, 2019.
- [o4] Cody Buntain, Learning Information Types in Social Media for Crises: TREC-IS, in Proceedings of the Twenty-Seventh Text REtrieval Conference (TREC 2018), Gaithersburg, MD, November, 2018.
- [03] Erin C. McGrath, Eric Dunford, Cody Buntain, Karsten Donnay, David Backer, David E. Cunningham, Explaining electoral violence in Sub-Saharan Africa using grievance measures derived from social media, the American Political Science Association Annual Convention, 2017.
- [o2] Cody Buntain, and Jimmy Lin, "Burst Detection in Social Media Streams for Tracking Interest Profiles in Real Time," in Proceedings of the Twenty-Fourth Text REtrieval Conference (TREC 2015), November 2015, Gaithersburg, Maryland.
- [01] **Cody Buntain**, Jennifer Golbeck, Dana Nau, and Sarit Kraus, Advice and trust in games of choice, in University of Maryland AI Day, April 2012.

SPONSORED RESEARCH

Role and Program: PI, "Mission Analytics Technology and Research for Innovative eXploitation (MATRIX)"

Sponsor: Air Force Research Labs (AFRL)

Duration: December 2023 – February 2027

Funding: \$111,271 (pending)

Role and Program: PI, "Foundations for Understanding and Measuring non-US Online Spaces During Conflict"

Sponsor: University of Regina

Duration: July 2023 – December 2025

Funding: \$57,586

Role and Program: Co-PI, "UMD Grand Challenge Impact Award: Pandemic Preparedness Institute (PPI)"

Sponsor: UMD

Duration: March 2023 - February 2024

Funding: \$200,000

Role and Program: PI, "DARPA YFA 2022: M3I - Maps, Models, and Metrics for Influence Efforts by State/Non-

State Actors'

Sponsor: DARPA

Duration: July 2022 - June 2024

Funding: \$500,000 base, \$500,000 option

Role and Program: Faculty Mentor, "A WhatsApp Service for Improving Information Quality"

Sponsor: NSF I-Corps Site at NJIT Duration: February 2021 – August 2021

Funding: \$2,000

Role and Program: PI, "Social Media Misinformation: Detection and Impacts"

Sponsor: Oak Ridge National Labs, National Geospatial Intelligence Agency

Duration: October 2020 - May 2021

Funding: \$145,086

Role and Program: PI, "Providing Twitter Enterprise Access"

Sponsor: National Institute for Standards and Technology

Duration: August 2020 - May 2021

Funding: \$106,003

Role and Program: **PI**, "The Role of Emotions in Adversarial Information Campaigns"

Sponsor: University of Maryland, Office of Naval Research

Duration: August 2019 – March 2022

Funding: \$46,138

Role and Program: PI, "Automated Program Analysis in Cybersecurity"

Sponsor: Defense Advanced Research Projects Agency (DARPA)

Duration: March 2012 – August 2013

Funding: \$1.5 million

Role and Program: PI, "Deception Studio: Attacker Characterization and Dynamic Relocation" Phase II

Sponsor: Air Force Research Labs (AFRL)

Duration: March 2011 – April 2013

Funding: \$745,519

Role and Program: PI, "Imbuing Trust in Untrusted Hardware to Improve Protections" Phase I

Sponsor: Air Force Research Labs (AFRL)
Duration: November 2010 – May 2011

Funding: \$97,559

Role and Program: PI, "Deception Studio: Attacker Characterization and Dynamic Relocation" Phase I

Sponsor: Air Force Research Labs (AFRL) Duration: November 2009 – May 2010

Funding: \$97,559

ACADEMIC SERVICE

GOVERNMENT

o **NSF**: Secure and Trustworthy Cyberspace (SaTC) Review Panel (2024)

EXTERNAL

- o NSF RCN: Democracy in a Network Era, Organizing Committee, 2024
- O ICWSM: ICWSM-Global Chair (2024), Workshop Chair (2022), Social Media Chair (2020), SPC (2020-2024), PC Member (2016-2020) for the International AAAI Conference on Web and Social Media
- o **CSCW**: SPC 2022-2024, Treasurer for CSCW 2021
- o **HKS Misinformation**: External Reviewer, 2023
- o **WWW**: Program Committee Member for the World Wide Web Conference, 2018-2020
- o **PNAS**: External Reviewer, 2022
- o JMLR: Journal of Machine Learning Research External Reviewer, 2017
- O Journal of Social Media+Society: External Reviewer, 2017-2018
- o CHI: ACM Conference on Human Factors in Computing, 2014, 2016, 2018-2019
- o HICSS: Annual Hawaii International Conference on System Sciences, 2014, 2018
- o Transactions of Knowledge and Data Engineering: External Reviewer, 2017
- o **SIGIR**: Special Interest Group on Information Retrieval, 2017
- o Transactions on Internet Technology: External Reviewer, 2017
- O Transactions on Internet Systems: External Reviewer, 2017

UNIVERSITY

- o **College**: Member, Faculty Search Committee (2024)
- o College: Member, MIM Committee (2023-2024)
- o **College**: Member, Search Committee for Assistant Director, Finance (2023)

TEACHING, EXTENSION, MENTORING, AND ADVISING

COURSES TAUGHT

- **UNUH2480**: We the (Artificial) People How AI has Reshaped Politics University of Maryland, Honors College, Fall 2024
- **INST414**: Data Science Techniques

University of Maryland, Spring 2022, Spring 2023, Fall 2023, Spring 2024

SPHL709: Reading Public Health Emergencies Through Information and Communication Research and Policy

University of Maryland, Winter 2024

• **IS688**: Web Mining

New Jersey Institute of Technology, Spring 2021, Fall 2021, Spring 2022

• **IS735**: Social Media

New Jersey Institute of Technology, Fall 2020

• **IS350**: Computers, Society, and Ethics

New Jersey Institute of Technology, Fall 2019, Spring 2020

• ENPM809G: Network Data Science

University of Maryland, Spring 2018

INST728E: Social Media and Crisis Informatics

University of Maryland, Winter 2018

• **INST346**: Technologies Infrastructure and Architecture

University of Maryland, Fall 2017

• INST326: Object-Oriented Programming for Information Science

University of Maryland, Summer 2017

• **CSC546**: Introduction to Computer Networks

American University, Fall 2015

COURSE OR CURRICULUM DEVELOPMENT

- Developing a new course for an AI cluster in the University Honors College, on how AI has reshaped politics, UNUH248O: We the (Artificial) People – How AI has Reshaped Politics, UMD, Fall 2024.
- Updated the web mining course to integrate web-scale and massive dataset mining techniques, IS688: Network Data Science, NJIT, Spring 2021.
- Co-developed a new course on network science for engineering students, including homework and final project development, ENPM809G: Network Data Science, University of Maryland, Spring 2018.
- Converted a workshop on social media and crisis informatics into a short course on social media data collection and analysis, INST728E: Social Media and Crisis Informatics, University of Maryland, Winter 2018.
- Developed new course curriculum, projects, and homework for a course on the Internet and information technologies to be taught to undergraduate School of Information students, INST346: Technologies Infrastructure and Architecture, University of Maryland, Fall 2017.
- Designed course curriculum, projects, and homework for the second-level course on object-oriented programming to be taught to undergraduate School of Information students, INST326:
 Object-Oriented Programming for Information Science, University of Maryland, Summer 2017.
- Designed curricula for a new computer networks course to be taught to undergraduate computer science students, CSC546: Introduction to Computer Networks, American University, Fall 2015.

STUDENT ADVISING

Cinthia Mabel Sanchez, PhD Committee Member, PhD Student, Computer Science Department, University of Chile

Fall 2023 - Present

Do Won Kim, PhD Co-Advisor, iSchool, UMD

 $Fall\ 2023-Present$

Yoo Yeon Sung, PhD Committee Member, PhD Student, CS, UMD

Fall 2023 – Present

Md Main Uddin Rony, PhD Committee Member, PhD Student, iSchool, UMD

Fall 2023 - Present

• Ruizhe Fan, PhD Supervisor, PhD Student, iSchool, UMD

Fall 2021 – Fall 2024

Celia Chen, PhD Supervisor, PhD Student, iSchool, UMD

Fall 2022 - Spring 2023

Megan Resurreccion, PhD Supervisor, PhD Student, Informatics, NJIT

Fall 2020 – Spring 2022

- Shivam Sharma, MS Thesis Committee Chair, MS Student, Computer Science, NJIT Fall 2019 – Spring 2021
- Samuel Parris, Undergraduate Student, Computer Science, NJIT
 Fall 2019 Spring 2021
- Triman Kaur, MS Student, Computer Science, NJIT Fall 2019 – Fall 2020
- David Kim, Ungraduate Student, Computer Science, NJIT Fall 2019 – Spring 2020

MENTORING ROLES

- RISC Internship Program Mentor, ARLIS, UMD Summar 2022, 2023, 2024
- Intern Co-Coordinator for NSF INSPIRE, START Center, UMD Fall 2016 – Spring 2018
- Cyber Security Intern Mentor, Pikewerks Corporation Spring 2013 – Fall 2013
- Alumnus Chapter Advisor to the Huntsville Chapter of Delta Chi Fall 2009 – Fall 2011

SPEAKING ENGAGEMENTS AND INVITED TALKS

- Visual Media in Online Political Engagement: Opportunities for Computational Social Science Georgetown University CS Colloquium Speaker.
 Washington, DC (22 March 2024)
- Testimony on Elections and Mis/Disinformation Maryland Senate's Joint Committee on Cyber Meeting. Annapolis, MS (25 October 2023)
- M3I Maps, Models, and Metrics for Influence in Conflict Zones Air Force Research Lab's 711 Human-Performance Wing Friday Forum. Dayton, OH (8 August 2023)
- Special Briefing on Russian Information Operations in Canada Standing Committee on National Security, Defence and Veterans Affairs, Canadian Senate. Ottawa, CA (1 May 2023)
- Effective Manipulation, the Socio-Technical Factors that Make Us Vulnerable, and Paths Forward Federal Information Integrity R&D Working Group, Networking and Information Technology Research and Development.
 - Washington, DC (24 March 2023)
- Data and Analytics Speaker Series: Centre for Artificial Intelligence, Data, and Conflict State Department, Bureau for Conflict Stabilization Operations Washington, DC (17 February 2023)
- (Un)Intended Mobilizing Effects: QAnon and Deplatforming in Social Media AI4 Behavior Change Workshop Washington, DC (13 February 2023)
- Platform Moderation and Cross-Platform Effects in the Online Information Ecosystem University of Delaware
 Wilmington, DE (19 March 2021)
- UTK Social Media Week: The Rise of Extremist Movements on Social Media: A Conversation with the Experts

University of Tennessee, Knoxville

Knoxville, TN (24 February 2021)

• Influence Operations and YouTube: Going Both Ways

Partnership for Countering Influence Online Working Group

New York City, NY (23 November 2020)

• Hot Tweets and Cold Posts: Politicians' Ideological Presentations on Twitter and Facebook

CrowdTangle: Researcher x Journalist Working Group

New York City, NY (15 July 2020)

• YouTube's Role in the Online Information Ecosystem: Radicalizer or Moderator

Rensselaer Polytechnic Institute

Troy, NY (13 December 2019)

• News, Ideology, and Cross-Platform Sharing

Digital Tracking Workshop

Washington, DC (29 May 2019)

 Comparing Sharing Behaviors and Ideology of Russian Actors Within and Across Online Social Platforms

Cornell Tech

New York, NY (29 March 2019)

#pray4victims: Consistencies In Response To Disaster on Twitter

Colloquium in Computational and Data Sciences, George Mason University

Fairfax, VA (8 March 2019)

• Empirical Study of Russian Actors Within and Across Online Social Platforms

Russia Public Policy Panel, NYU's Jordan Center

New York, NY (7 February 2019)

 Greening Governance: Mapping Restoration to Strengthen Community Governance on the Ground and in the Cloud

World Resource Institute

Washington, D.C. (12 December 2018)

• Methods for Large-Scale Data Collection from Social Media

Stony Brook University

Stony Brook, NY. (13 November 2018)

 Civil Unrest Social Media Surveillance, Panelist for Sensors, Internet of Things (IoT), Telematics and Cybersecurity

InsurTech Science and Engineering Innovation Expo

New York, NY. (9 August 2018)

Gaining Insight into Real-World Societal Response Using Social Media

Intelligence Community Academic Research Symposium

Washington, D.C. (28 September 2017)

• Leveraging Large Online Spaces to Study Communities and Response to Crises

University of Washington

Seattle, WA (23 August 2017)

• Leveraging Multiple Social Media Platforms for Evaluating Story Credibility

 $1st\ North\ American\ Social\ Networks\ Conference, of the\ International\ Network\ for\ Social\ Network\ Analysis,\ NASN2017$

Washington, D.C. (27 July 2017)

• Tutorial on Social Media Analytics During Crises

1st North American Social Networks Conference, of the International Network for Social Network Analysis, NASN2017

Washington, D.C. (26 July 2017)

• Tutorial on Social Media Analytics During Crises

HCIL Symposium, University of Maryland, College Park

College Park, MD (May 2017, May 2016)

• "Researching Ferguson: Advanced Analytical Techniques"

University of Maryland, College Park

College Park, MD (9 April 2015)

"Data's Metamorphosis: Algorithms for Detecting Change Points in Data"

University of Amsterdam

Amsterdam, NL (24 July 2014)

"Applications of and Issues in Machine Learning in Social Networks"

University of Alabama in Huntsville

Huntsville, AL (29 May 2013)

• "On Shaky Ground – Low-Level Threats in the Supply Chain"

North Alabama Cyber Security Summit

Huntsville, AL (June 2012)

• "Supply Chain Risk Management for Fun and Profit"

InfraGard Huntsville Chapter

Huntsville, AL (March 2011)

• "Environmental key generation and hardware-binding"

The Anti-Tamper Short Course

Huntsville, AL (10 June 2010)

 "Learn, protect, adapt: Expanding protections outside the box"
 Software Protection, Information Assurance, and Anti-Tamper SBIR Workshop Dayton, OH (July 2010)

SELECTED PRESS AND INTERVIEWS

 Wall Street Journal "Meta to Replace Widely Used Data Tool – and Largely Cut Off Reporter Access"

March 2024

 Mother Jones "Progressive Facebook Moms' Groups Are Melting Down Over the Israel-Hamas War"

November 2023

 The New York Times "Far-Left Canadians Susceptible to Russian Influence Too" March 2023

• The Globe and Mail "Pro-Kremlin Twitter accounts 'weaponizing' fringe users to erode Canadians' support for Ukraine, study finds"

March 2023

- The Conversation "The Taliban shifts tactics in its determination to control and oppress women" August 2022
- Bloomberg "Meta Pulls Support for Tool Used to Keep Misinformation in Check" June 2022
- Washington Post "Facebook made big mistake in data it provided to researchers, undermining academic work"

September 2021

- New York Times "Facebook sent flawed data to misinformation researchers."
 September 2021
- Business Insider "Facebook admits it messed up again."
 September 2021
- The Independent "Facebook Accidentally Gave Misinformation About Misinformation To Researchers."

September 2021

 ITSPmagazine Podcast "Social Media, Disinformation, And Algorithms — How Did We Get Here? | Redefining Society With Cody Buntain"
 August 2021

- NBC 4 New York "I-Team: Meet the Troll Hunters" October 2020
- Data Privacy Detective Podcast Episode 55 "Differential Privacy and Academic Research"
 October 2020
- Washington Post"Are influence campaigns trolling your social media feeds?"
 October 2020
- Business Insider "A new algorithm could catch social-media trolls as they try to influence US elections. Researchers are offering it for free."
 July 2020
- CNET "Private Facebook groups are using 'Justice for George Floyd' as a cloak for racist behavior"

June 2020

WIRED "Twitter's Disinformation Data Dumps Are Helpful – to a Point"
 July 2019