

Education

Northwestern University (Ph.D. in Computer Science & Communication Studies, 2023) Dissertation: <u>Auditing Algorithmic Communication Flows</u>.

University of Kentucky (M.S. in Computer Science, 2018)

Wheaton College, IL (B.S. in Computer Science, 2016)

Teaching Experience

CLINICAL ASSISTANT PROFESSOR, UNIVERSITY OF ILLINOIS CHICAGO – FALL 2025 - PRESENTFirst year teaching responsibilities include multiple sections of "Ethical Issues in Computing" taught over UIC's 15-week semester.

ASSISTANT PROFESSOR, TRANSYLVANIA UNIVERSITY – LEXINGTON, KY – FALL 2023 - FALL 2025 Courses taught include: Internet Memes, Algorithmic Fairness and Bias, Human-Computer Interaction, Discrete Mathematics, Introduction to Computer Science, and Object-Oriented Programming.

INSTRUCTOR, NORTHWESTERN UNIVERSITY – EVANSTON, IL – WINTER 2021 AND FALL 2022Upper-level seminar with 15 undergraduate students, taught independently. Course covered social and ethical issues in computing, guiding students to complete a 20-page research paper by the end of the 10-week quarter.

TEACHING ASSISTANT, NORTHWESTERN UNIVERSITY – EVANSTON, IL – SPRING 2021 AND 2022Teaching assistant for Dr. Adam Waytz's ethics class, Kellogg School of Management.

INSTRUCTOR, NORTHWESTERN UNIVERSITY – EVANSTON, IL – WINTER 2020 AND 2021

Taught introductory programming concepts to undergraduate students as part of the "Computing Everywhere" series in the communication department.

Research Experience

PhD CANDIDATE, NORTHWESTERN UNIVERSITY – EVANSTON, IL – 2018 - 2023

Mainline research in auditing algorithmic platforms (e.g. Apple News, TikTok, Twitter, Facebook) and their role in mass communication. Advised by Dr. Nicholas Diakopoulos, Computational Journalism Lab.

MACHINE LEARNING ETHICS INTERN, TWITTER INC. - REMOTE - FALL 2021

Analyzed dissemination of abusive content across Twitter using real-world, petabyte-scale datasets. Results from my work were published with collaborators at ICWSM 2023.

GRADUATE RESEARCH ASSISTANT, UNIVERSITY OF KENTUCKY – LEXINGTON, KY – 2016 - 2018Applied deep learning to identify ink in microCT scans of ancient scrolls, culminating in a PLOS ONE publication. Advised by Dr. Brent Seales.

Jack Bandy, Ph.D. Page 1 of 4

RESEARCH ASSISTANT, UNC CHARLOTTE – CHARLOTTE, NC – SUMMER OF 2015 & 2016

National Science Foundation's Research Experience for Undergraduates at UNC Charlotte. Resulted in PerCom publication. Advised by Dr. Jamie Payton.

Selected Peer-Reviewed Publications

Hagar, N. & Bandy, J. (2025) <u>Practical Datasets for Analyzing LLM Corpora Derived from Common Crawl</u>. ICWSM 2025.

Bandy, J., & Diakopoulos, N. (2023) <u>Facebook's News Feed Algorithm and the 2020 US Election</u>. Social Media + Society. September 2023.

Bandy, J., & Lazovich, T. (2023). <u>Exposure to Marginally Abusive Content on Twitter</u>. ICWSM 2023.

Bandy, J. (2022). <u>Inspecting Algorithmic Flows: Ethics, Transparency, and Accountability for Digital Mass Communication Platforms</u>. AIES 2022, Student Track.

Bandy, J., & Diakopoulos, N. (2021) <u>Curating Quality? How Twitter's Timeline Algorithm</u> <u>Treats Different Types of News</u>. Social Media + Society. July 2021.

Bandy, J., & Vincent, N. (2021) <u>Addressing "Documentation Debt" in Machine Learning Research: A Retrospective Datasheet for BookCorpus</u>. NeurIPS 2020, Datasets Track.

Bandy, J., & Diakopoulos, N. (2021) <u>More Accounts, Fewer Links: How Algorithmic Curation Impacts Media Exposure in Twitter Timelines</u>. CSCW 2021.

Bandy, J., & Hecht, B. (2021) <u>Errors in Geotargeted Display Advertising: Good News for</u> Local Journalism? CSCW 2021.

Bandy, J. (2021) <u>Problematic Machine Behavior: A Systematic Literature Review of</u> Algorithm Audits. CSCW 2021.

Bandy, J., and Diakopoulos, N. (2020) "<u>Auditing News Curation Systems: A Case Study Examining Algorithmic and Editorial Logic in Apple News.</u>" ICWSM 2020.

Parker, C. S., Parsons, S., **Bandy**, J., Chapman, C., Coppens, F., & Seales, W. B. (2019) <u>From</u> invisibility to readability: Recovering the ink of Herculaneum. PLOS ONE.

Book Chapters, Workshop Papers, and Technical Reports

Chen, J., Bandy, J., Buckley, D., & Bhatia, R. (2024). <u>Al transparency in practice: What was learnt from a third-party audit of recommender systems at LinkedIn and Dailymotion</u>. The Christchurch Call Foundation. ISBN: 978-1-0670444-0-4

Bandy, J., & Diakopoulos, N. (2023). <u>All the News that's Fit to Tweet: Sociotechnical Local News Distribution from the New York Times to Twitter</u>. In *News Quality in the Digital Age*, edited by Regina Lawrence and Phil Napoli. Routledge.

Jack Bandy, Ph.D. Page 2 of 4

Diakopoulos, N., Bandy, J., & Dambanemuya, H. (2023). <u>Auditing Human-Machine Communication Systems Using Simulated Humans</u>. In *Handbook of Human-Machine Communication*, edited by Andrea L. Guzman, Rhonda McEwen, and Steve Jones.

Bandy, J., & Diakopoulos, N. (2020) <u>#TulsaFlop: A Case Study of Algorithmically-Influenced Collective Action on TikTok</u>. FAcctRec Workshop at RecSys 2020.

Hagar, N., Bandy, J., Trielli, D., Wang, Y., & Diakopoulos, N. (2020) <u>Defining Local News: A Computational Approach</u>. Computation + Journalism Symposium 2020.

Bandy, J., & Diakopoulos, N (2019). <u>Getting to the Core of Algorithmic News</u> <u>Aggregators</u>. Computation + Journalism Symposium 2019.

Bandy, J. (2018) <u>Interactive Machine Learning for Word Spotting on Damaged Handwritten Documents</u>. University of Kentucky Master's Thesis.

Bandy, J., Knighten, J., & Payton, J. (2016) <u>Demonstrating HighFiveLive: A mobile application for recognizing symbolic gestures</u>. 2016 IEEE PerCom Workshops.

Selected Public Writing

Bandy, J. (Forthcoming). The Emperor's New Media: How Big Tech Strangles Communication through Algorithms. Palgrave Macmillan (Pivot Series).

Bandy, J. (2024). "People are the Answer, not Artificial Intelligence." Justice Rising: Building a New Media Landscape for a Stronger Democracy.

Bandy, J. (2021). "Fixing to Die." Real Life Magazine.

Bandy, J. (2021). "Follow the science, Chicago, and abolish ShotSpotter." *Chicago Tribune*.

Bandy, J., and Diakopoulos, N. (2021). "Amping up algorithmic transparency to govern online platform power." The Hill.

Professional and Community Service

PEER REVIEW - FALL 2020 - PRESENT

Ongoing peer review for conferences and journals in my field, including:

- Journal of Social Media & Society
- Journal of Big Data and Society
- Journal of Communication Research
- International Journal of Press and Politics
- ACM Conference on Fairness, Accountability, and Transparency (ACM FAccT) (Program Committee Member in 2024)

Jack Bandy, Ph.D. Page 3 of 4

- AAAI/ACM Conference on AI, Ethics, and Society (AIES)
 (Program Committee Member in 2024 for Student Track)
- ACM Conference On Computer-Supported Cooperative Work (ACM CSCW)
- ACM Conference on Human Factors in Computing Systems (ACM CHI)

SOCIAL JUSTICE AND DATA SCIENCE FACULTY LEARNING COMMUNITY - FALL 2024

Collaborating with faculty to develop campus-wide understanding around data-driven approaches to social justice issues. Topics include ethical data use, fairness, transparency, data visualization and storytelling, interdisciplinary approaches, and the limits of data.

AI IN HIGHER EDUCATION FACULTY LEARNING COMMUNITY - SPRING 2024

Researched classroom AI applications, developed assignments, helped build resources for faculty, and completed the "Teaching with AI" online course from Auburn University.

HUMAN-COMPUTER INTERACTION READING GROUP – SUMMER 2020 - SUMMER 2023Co-organizer for a graduate student book club at Northwestern University.

AI @ NU GRADUATE STUDENT BOARD MEMBER - SUMMER 2020 - SUMMER 2023

Represented the school of communication for the <u>Al@NU graduate student group</u>. Included event planning, community engagement, and administration.

PRESENTER, UNCONTROLLED VARIABLES - SUMMER 2021

Provided one of two "scientist presentations" for the <u>Uncontrolled Variables comedy show</u>. The theme for the show was "<u>The Science of Social Media</u>."

VOLUNTEER, FACCT CONFERENCE – SPRING 2021

Helped moderate and facilitate workshops for the 2021 ACM conference on Fairness, Accountability, and Transparency (FAccT).

ELECTION JUDGE – FALL 2020 AND SPRING 2022

Trained and served as an election judge for the city of Chicago in the Fall 2020 general election and the Spring 2022 primary election.

SSRC "NEWS QUALITY IN THE PLATFORM ERA" WORKSHOP – SUMMER 2020

Participant in the <u>SSRC workshop</u> organized around media, technology, and democracy. Writings from this workshop progressed into the book <u>News Quality in the Digital Age</u>.

Distant Voice Apparatus

Some people put this in plain text at the top of their CV. Mine is: ate five nine, six won nine, 6-7, six too. Call if you want to give me a gig, a film recommendation, and/or land.

Personal Interests and Hobbies

Movies, piano lessons, half marathons, deadlifting, hiking, camping, avoiding cars, birdwatching, gardening, cooking, meeting people who read my full CV, enjoying life.

Jack Bandy, Ph.D. Page 4 of 4