



Jack Bandy

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Education

Northwestern University (Ph.D. Computer Science & Communication Studies, est. 2023)

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

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

Experience

PHD CANDIDATE, NORTHWESTERN UNIVERSITY – EVANSTON, IL – 2018 - PRESENT

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

INSTRUCTOR, NORTHWESTERN UNIVERSITY – EVANSTON, IL – WINTER 2021

Taught one section of Communication Studies 394, an upper-level writing seminar with 15 undergraduate students. The course covered social and ethical issues in computing, guiding students to write a 20-page research paper by the end of the quarter.

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

Researched exposure to marginal content across Twitter using real-world, petabyte-scale datasets. Results from my work have been submitted for publication.

TEACHING ASSISTANT, NORTHWESTERN UNIVERSITY – EVANSTON, IL – SPRING 2021 AND 2022

Teaching assistant for Dr. Adam Waytz's ethics class, Kellogg School of Management.

GRADUATE RESEARCH ASSISTANT, UNIVERSITY OF KENTUCKY – LEXINGTON, KY – 2016 - 2018

Applied deep learning to identify ink in microCT scans of ancient scrolls, culminating in a PLOS ONE publication. Advised by Dr. Brent Seales.

SOFTWARE DEVELOPER, LEGIT APPS LLC – LEXINGTON, KY – SUMMER 2017

Worked on a small team in a scrum-style environment to produce, publish, and maintain mobile applications on both iOS and Android.

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.

Select Peer-Reviewed Publications

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

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

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

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

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

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

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

Workshop Papers, Demos, and Book Chapters

Bandy, J., & Diakopoulos, N. (Forthcoming). All the News that's Fit to Tweet: Sociotechnical Local News Distribution from the New York Times to Twitter. Book Chapter for *News Quality in the Digital Era*.

Diakopoulos, N., **Bandy, J.**, & Dambanemuya, H. (2021). Auditing Human-Machine Communication Systems Using Simulated Humans. *Handbook of Human-Machine Communication*.

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

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

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

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

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

Public Writing

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.

Community Service and Other Roles

TECHNOLOGY AND JUSTICE READING GROUP – SUMMER 2020 - PRESENT

Co-organizer for a [graduate student book club](#) at Northwestern University, reading about technology's relationship to systems of power, oppression, and social justice.

AI @ NU GRADUATE STUDENT BOARD MEMBER – SUMMER 2020 - PRESENT

Representing the school of communication for the [AI@NU graduate student group](#). Includes event planning, community engagement, and administrative tasks.

DEPARTMENT ORGANIZER, NORTHWESTERN GRADUATE WORKERS – FALL 2021 - PRESENT

Helping organize graduate students at Northwestern University. Current role involves website maintenance, STEM outreach, event planning, and more.

PRESENTER, UNCONTROLLED VARIABLES – SUMMER 2021

Provided one of two "scientist presentations" for the [Uncontrolled Variables comedy show](#). The theme for the show was "[The Science of Social Media](#)."

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

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

PEER REVIEW – FALL 2020 - PRESENT

Ongoing peer review for conferences and journals in my field, including CSCW, CHI, ICWSM, FAccT, Social Media & Society, and miscellaneous journals.

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

Participant in the [SSRC workshop](#) organized around media, technology, and democracy. Writings from this workshop have progressed into a forthcoming book.