Nicholas Vincent

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🔗 www.nickmvincent.com

Research Interests

Responsible Artificial Intelligence, Human-computer Interaction, Human-centered Machine Learning, Social Computing

Academic Appointments

Assistant Professor *Burnaby, BC, Canada*
Simon Fraser University, School of Computing Science *July 2023 – present*
- Associate Member in the School of Public Policy

Postdoctoral Scholar *Davis, CA, USA*
University of California, Davis *Jan 2023 – July 2023*
- Co-advised by Seth Frey ↗ (UC Davis, Department of Communication) and Amy X. Zhang ↗ (University of Washington, School of Computer Science and Engineering)

Education

Northwestern University *Sept 2017 – Dec 2022*
PhD in Technology and Social Behavior (joint degree, Computer Science and Communication)
- Advisor: Brent Hecht ↗
- Dissertation ↗ - Data Leverage: A Framework for Empowering the Public to Mitigate Harms of Artificial Intelligence. Received SIGCHI 2024 Outstanding Dissertation Award and Northwestern University Department of Communication Dissertation Award

University of California, Los Angeles *Sept 2012 – June 2016*
BS in Electrical Engineering
- Magna Cum Laude

Archival Publications

Pika: Empowering Non-Programmers to Author Executable Governance Policies in Online Communities 2024

Leijie Wang, Nicholas Vincent, Julija Rukanskaitė, Amy X. Zhang

ACM CHI 2024

A Canary in the AI Coal Mine: American Jews May Be Disproportionately Harmed by Intellectual Property Dispossession in Large Language Model Training 2024

Heila Precel, Allison McDonald, Brent Hecht, Nicholas Vincent

ACM CHI 2024

Peer Produced Friction: How Page Protection on Wikipedia Affects Editor Engagement and Concentration 2023

Leah Ajmani, Nicholas Vincent, Stevie Chancellor

10.1145/3610198 ↗ (ACM CSCW 2023)

The Dimensions of Data Labor: A Road Map for Researchers, Activists, and Policymakers to Empower Data Producers 2023

Hanlin Li, Nicholas Vincent, Stevie Chancellor, Brent Hecht

10.1145/3593013.3594070 ↗ (ACM FAccT 2023)

Behavioral Use Licensing for Responsible AI 2022

Danish Contractor, Daniel McDuff, Julia Katherine Haines, Jenny Lee, Christopher Hines, Brent Hecht, Nicholas Vincent, Hanlin Li

10.1145/3531146.3533143 ✔ (ACM FAccT 2022)

CEAM: The Effectiveness of Cyclic and Ephemeral Attention Models of User Behavior on Social Platforms 2021

Farhan Asif Chowdhury, Yozen Liu, Koustuv Saha, Nicholas Vincent, Leonardo Neves, Neil Shah, Maarten W Bos

10.1609/icwsm.v15i1.18046 ✔ (AAAI ICWSM 2021)

Addressing "Documentation Debt" in Machine Learning Research: A Retrospective Datasheet for BookCorpus 2021

Jack Bandy, Nicholas Vincent

NeurIPS 2021 Datasets and Benchmarks Track

AdverTiming Matters: Examining User Ad Consumption for Effective Ad Allocations on Social Media 2021

Koustuv Saha, Yozen Liu, Nicholas Vincent, Farhan Asif Chowdhury, Leonardo Neves, Neil Shah, Maarten W Bos

10.1145/3411764.3445394 ✔ (ACM CHI 2021)

A Deeper Investigation of the Importance of Wikipedia Links to Search Engine Results 2021

Nicholas Vincent, Brent Hecht

10.1145/3449078 ✔ (ACM CSCW 2021)

Can "Conscious Data Contribution" Help Users to Exert "Data Leverage" Against Technology Companies? 2021

Nicholas Vincent, Brent Hecht

10.1145/3449177 ✔ (ACM CSCW 2021)

Data Leverage: A Framework for Empowering the Public in its Relationship with Technology Companies 2021

Nicholas Vincent, Hanlin Li, Nicole Tilly, Stevie Chancellor, Brent Hecht

10.1145/3442188.3445885 ✔ (ACM FAccT 2021)

How Do People Change Their Technology Use in Protest?: Understanding "Protest Users" 2019

Hanlin Li, Nicholas Vincent, Janice Tsai, Jofish Kaye, Brent Hecht

10.1145/3359189 ✔ (ACM CSCW 2019)

Measuring the Importance of User-Generated Content to Search Engines 2019

Nicholas Vincent, Isaac Johnson, Patrick Sheehan, Brent Hecht

10.1609/icwsm.v13i01.3248 ✔ (AAAI ICWSM 2019)

"Data Strikes": Evaluating the Effectiveness of a New Form of Collective Action Against Technology Companies 2019

Nicholas Vincent, Brent Hecht, Shilad Sen

10.1145/3308558.3313742 ✔ (ACM The Web Conference 2019)

Women (still) ask for less: Gender differences in hourly rate in an online labor marketplace 2018

Eureka Foong, Nicholas Vincent, Brent Hecht, Elizabeth M Gerber

10.1145/3274322 ✔ (ACM CSCW 2018)

Examining Wikipedia With a Broader Lens: Quantifying the Value of Wikipedia's Relationships with Other Large-Scale Online Communities 2018

Nicholas Vincent, Isaac Johnson, Brent Hecht

[10.1145/3173574.3174140](#) ↗ (ACM CHI 2018)

Workshop Publications

Designing an open-source LLM interface and social platforms for collectively driven LLM evaluation and auditing	2024

Timothy J. Baek, Nicholas Vincent, Lawrence Kim

HEAL Workshop @ CHI 2024

The Need for Flexible Interfaces for Text-to-Image Auditing: A Case Study of DALL · E 2 and DALL · E 3	2024

Clare Provenzano, Parsa Rajabi, Diana Cukierman, Nicholas Vincent

GenAICHI Workshop @ CHI 2024

An Alternative to Regulation: The Case for Public AI	2023

Nicholas Vincent, David Bau, Sarah Schwettmann, Joshua Tan

RegML Workshop @ NeurIPS 2023

Sharing the Winnings of AI with Data Dividends: Challenges with 'Meritocratic' Data Valuation	2023

Nicholas Vincent, Brent Hecht

Poster track @ EAAMO 2023

Collaborative Design of Contribution Tracking Systems for Decentralized Organizations	2022

Nicholas Vincent, Christine Vandevoorde

CESC 2022 @ UC Berkeley

Misleading Tweets and Helpful Notes: Investigating Data Labor by Twitter Birdwatch Users	2022

Isaiah Jones, Brent Hecht, Nicholas Vincent

Poster track @ ACM CSCW 2022

Deep learning of tissue fate features in acute ischemic stroke	2015

Noah Stier, Nicholas Vincent, David Liebeskind, Fabien Scalzo

BIBM 2015 Workshop on Biomedical Visual Search and Deep Learning

Detection of hyperperfusion on arterial spin labeling using deep learning	2015

Nicholas Vincent, Noah Stier, Songlin Yu, David S Liebeskind, Danny JJ Wang, Fabien Scalzo

BIBM 2015 Workshop on Biomedical Visual Search and Deep Learning

Other Publications

Push and Pull: A Framework for Measuring Attentional Agency	2024

Zachary Wojtowicz, Shrey Jain, Nicholas Vincent

arXiv preprint

Twitter Engagement with Retracted Articles: Who, When, and How?	2022

Rod Abhari, Nicholas Vincent, Henry K Dambanemuya, Herminio Bodon, Emőke-Ágnes Horvát

arXiv preprint

From My Data to Our Data: A Proposal to Equitably Distribute Wealth in a Digital Economy, in The Future of Building Wealth: Brief Essays on the Best Ideas to Build Wealth—for Everyone	2021

Yakov Feygin, Nicholas Vincent, Hanlin Li, Chirag Lala, Luisa Scarcella

Book Chapter

A Data Dividend that Works: Steps Toward Building an Equitable Data Economy   2021

Yakov Feygin, Hanlin Li, Chirag Lala, Brent Hecht, Nicholas Vincent, Luisa Scarcella, Matthew Prewitt

Berggruen Institute white paper

Mapping the Potential and Pitfalls of 'Data Dividends' as a Means of Sharing the Profits of Artificial Intelligence.   2019

Nicholas Vincent, Yichun Li, Renee Zha, Brent Hecht

arXiv preprint

News Coverage

- Richard Mylles. Is data supply AI's Achilles' heel? ☑. UBS, June 2024
- Kevin Shaul. Is this AI? See if you can spot the technology in your everyday life. ☑. The Washington Post, April 2024
- Tom McKay. Nicholas Vincent explains why robots.txt is no longer enough to protect against web scraping ☑. IT Brew, March 2024
- Asaf Elia-Shalev. Jews have always been prolific writers. Has AI wound up with too much of their work? ☑. Jewish Telegraphic Agency, March 2024
- Nitasha Tiku. Newspapers want payment for articles used to power ChatGPT. ☑. The Washington Post, October 2023
- Kali Hays and Alistair Barr. AI is killing the grand bargain at the heart of the web. 'We're in a different world.' ☑. Business Insider, January 2024
- Alistar Barr. 'Data leverage' and the Harry Potter test: How much is a single book worth to a giant AI model? ☑. Business Insider, August 2023
- Jon Gernter. Wikipedia's Moment of Truth. ☑. New York Times Magazine, September 2023
- Melissa Heikkilä. We are all AI's free data workers. ☑. MIT Technology Review, June 2023
- Aurélien Defer. Internet users are 'poisoning' their personal data in the fight against online surveillance. ☑. Le Monde, April 2022
- Rebecca Heilweil. Got the same name as a serial killer? Google might think you're the same person. ☑. Vox, June 2021
- Peter Coy. Facebook and Others Should Pay Us for Our Data. Here's One Way. ☑. Bloomberg, May 2021
- Karen Hao. How to poison the data that Big Tech use to surveil you. ☑. MIT Technology Review, March 2021
- Jonathan Vanian and Jeremy Kahn. Your data is a weapon that can help change corporate behavior. ☑. Fortune, February 2021
- Nicolás Rivero. Is it time for Netflix subscribers to go on strike? ☑. Quartz, July 2020
- John Herrman. YouTube May Add to the Burdens of Humble Wikipedia. ☑. New York Times, March 2018

Grants

NSERC Discovery Grant: Empowering Data Creators to Advance Responsible Artificial Intelligence. Prinical investigator. 2024-2029. 125,000 CAD.

Breaking Barriers Interdisciplinary Incentive Grant: Data Empowerment through Data Sharing in the Humanities. Co-investigator. 2024. With Michelle Levy, Sheelagh Carpendale, Denise Oleksijczuk. 60,000 CAD.

Professional Experience

Research Intern (Office of the CTO)   *Redmond, WA, USA*
Microsoft   *May 2021 – Aug 2021*

Research Intern (Computational Social Science)   *Santa Monica, CA,*
Snap Inc   *USA*
                                                                 Mar 2020 – June 2020

Cloud Programming Specialist   *Chicago, IL, USA*
Cloudbakers   *Sept 2016 – June 2017*

NREIP Naval Research Intern   *San Diego, CA, USA*
Space and Naval Warfare Systems Command (now NAVWAR)   *June 2016 – Aug 2016*
- Also interned in 2015

Software Engineer Intern   *San Jose, CA, USA*
Cisco Systems   *June 2014 – Sept 2014*
- Also interned in 2013 (Cross Functional Intern)

Teaching Experience

Primary Instructor   *Spring 2024*
Simon Fraser University, School of Computing Science
- CMPT 419 ↗, Special Topics in AI: Human and Data-centered AI

Primary Instructor   *Sept 2023 – Dec 2023*
Simon Fraser University, School of Computing Science
- CMPT 120 ↗, Introduction to Computing Science and Programming

Teaching Assistant   *Sept 2020 – Dec 2020*
Northwestern University
- MTS 525 ↗, Statistics and Statistical Programming

Academic Reviewing

Conference Meta-reviews: AAAI ICWSM (2023), ACM EAAMO (2023)

Conferences: ACM CHI; ACM CSCW; AAAI ICWSM; NeurIPS (2023, 2024); NeurIPS Datasets and Benchmarks Track (2021, 2022, 2023, 2024); ICML (2024); ACM The Web Conference (2022 PC and 2023 PC); WikiWorkshop (2023 PC); ACM FAccT (2022, 2023, and 2024 PC); ACM WSDM (2023 PC); IC2S2 (2023); ACM EAAMO

Journals: Nature Machine Intelligence; PLOS One; Patterns; Information, Communication, and Society; ACM Journal on Responsible Computing

Funding: Wikimedia Foundation Research Fund

Commendations: Best Reviewer - ICWSM 2022, Outstanding Reviewer - NeurIPS Datasets and Benchmarks 2022, Best Reviewer - ICWSM 2021, Highly useful reviewer - CSCW 2022

Conference Service

AI Palace Organizer   *2023 - 2024*
- Organized the AI Palace conference in Bückeberg, Germany in 2023 and 2024.

ICWSM 2024 Data Challenge Co-chair   *2024*
- Organized the Data Challenge conference track at ICWSM 2024.

InfoSocial Graduate Student Conference General Chair   *2018*
- Served as one of two co-chairs for the InfoSocial ↗ student-run conference, which included paper sessions, panels, and networking opportunities.

Workshops Organized

- Hanlin Li, Nicholas Vincent, Yacine Jernite, Nick Merrill, Jesse Josua Benjamin, Alek Tarkowski. Can Licensing Mitigate the Negative Implications of Commercial Web Scraping? ↗. Workshop at CSCW 2023, 2023
- Leah Ajmani, Mo Houtti, Jasmine C Foriest, Michael Ann Devito, Nicholas Vincent, Isaac Johnson. Epistemic Injustice in Online Communities: Unpacking the Values of Knowledge Creation and Curation within CSCW Applications ↗. Workshop at CSCW 2023, 2023
- Hanlin Li, Leah Ajmani, Moyan Zhou, Nicholas Vincent, Sohyeon Hwang, Tiziano Piccardi, Sneha Narayan, Sherae Daniel, Veniamin Veselovsky. Ethical Tensions, Norms, and Directions in the Extraction of Online Volunteer Work ↗. Workshop at CSCW 2022, 2022

Other Service

Simon Fraser University, Undergraduate Program Committee	*2023-2024*
California Data Dividends Working Group, Organizer	*2019-2022*
Northwestern University Artificial Intelligence Journal Club, Organizer	*2019-2021*
Northwestern University, Computer Science Ph.D. Advisory Council	*2018*

Graduate Student Research Mentoring

MSc Students at Simon Fraser University: Parsa Rajabi (Examiner), Mahdie Ghane (Committee Member)

Undergraduate Student Research Mentoring

At Northwestern University (People, Space, and Algorithms Research Group): Patrick Sheehan (co-wrote a conference paper), Ramish Zaidi, Alan Li (co-wrote a preprint), Renee Zha (co-wrote a preprint), Neil Vakharia, Isaiah Jones (first author of a workshop paper)

At Simon Fraser University (People and Data Computing Group): Clare Provezano (first author of a workshop paper), Patrick Zhao, Jashandeep Kaur, Laksh Agarwal

Awards

- ACM SIGCHI Outstanding Dissertation Award ↗, 2024
- Northwestern University School of Communication Graduate Dissertation Award ↗, 2023
- President Fellowship Finalist, Northwestern University, 2019
- NSF-GRFP Honorable Mention, 2018

Selected Talks

Economic Concentration and Dispossessive Data Use: Can HCI Solve Challenges from and to AI?	*May 2024*
○ Event: SIGCHI 2024 Outstanding Dissertation Award ↗	
A New Grand Data Bargain for Public Interest AI	*Feb 2024*
○ Event: Digital Democracies Institute Spring Speaker Series ↗	
Responsive LLM Development	*Jan 2024*
○ Event: University of Toronto Data Sciences Institute: Fairness - ChatGPT Workshop ↗	
Community Dialogue on Accountable Governance and Data	*Mar 2023*
○ Event: Community Data Science Collective Community Dialogues ↗	
Algorithmic Contestability	*Jan 2023*
○ Event: Center for Advancing Safety of Machine Intelligence, Toward a Safety Science of AI ↗	
Public interest technologies for the ML age	*May 2021*
○ Event: 3rd Obfuscation Workshop ↗	

The Importance of Wikipedia to Search Engines and Other Systems   *May 2021*
- Event: Wikipedia Research Showcase ☑ (Video ☑)

Data Agency: Individual or Shared?   *Jan 2021*
- Event: RadicalxChange Panels (Video ☑)

Data Driven Economy for All   *July 2020*
- Event: RadicalxChange 2020 Conference ☑ (Video ☑)

The Critical Relationship of Volunteer-Created Wikipedia Content to Large-Scale Online Communities   *Apr 2018*
- Event: Wikipedia Research Showcase ☑ (Video ☑)