Annie Y. Chen

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Research Experience

DATA SCIENTIST, *Sept. 2021 - Present*

CUNY INSTITUTE FOR LOCAL AND STATE GOVERNANCE

- Develop and implement machine learning models to make probabilistic linkages between administrative data (CAD records, body-worn camera metadata, stop and arrest reports); clean, restructure, merge, and analyze these data to support the study of legal compliance in police-civilian encounters
- Synthesize findings in reports and make statistical information digestible to legal professionals in NYC's police monitorship
- Conceived award-winning (National Institute of Justice) methodology to study perceptions of police using online trace data
- Design program evaluation study that exploit quasi-experimental methods
- Collect performance metrics for NYC's Public Safety Dashboard to assess the implementation of the NYPD Reform Plan
- Maintain data integrity, documentation, and code repositories; establish code review protocols
- Automated scraping of unstructured data from NYPD website and extraction of data from New York's OpenData portal with cron jobs

RESEARCH FELLOW, *Aug. 2020 - 2021*

DEPT. QUANTITATIVE SOCIAL SCIENCE, DARTMOUTH COLLEGE

- Designed and analyzed Americans' attitudes toward democracy and confidence in elections before and following the 2020 presidential election with a nationally representative survey panel
- Wrangled large-scale web behavior data, run statistical analyses, and produce data visualizations to assess social media consumption
- Built data pipeline to collect Twitter data of U.S. state legislators and local government officials
- Designed an experiment to investigate how news feed ranking algorithms influence engagement with untrustworthy content
- Collected social media data via platform APIs (e.g., Twitter Academic API, YouTube Data API, Facebook Ads API, CrowdTangle API)
- Supported write-up of findings and revision of manuscripts for academic publication

RESEARCH ASSISTANT, *Apr. 2019 - Jul. 2020*

CENTRE FOR THE STUDY OF DEMOCRATIC CITIZENSHIP

- Programmed and designed conjoint survey experiments in Qualtrics with Javascript; analyzed results of experiments fielded in Nigeria and Canada
- Ran Facebook advertising campaigns to survey hard-to-reach migrant populations
- Explored weighting and matching procedures to align demographic profile of sample to census or other nationally representative survey data
- Wrote programs to convert documents into machine-readable PDFs using OCR technology and extract text data for Natural Language Processing

Academic Publications

Chen, Annie Y., Brendan Nyhan, Jason Reifler, Ronald E. Robertson, and Christo Wilson. **"Subscriptions and External Links Help Drive Resentful Users to Alternative and Extremist YouTube Videos."** *Science Advances* 9, eadd8080 (2023). https://doi.org/10.1126/sciadv.add8080

Nyhan, Brendan., Jaime Settle, Emily Thorson, Magdalena Wojcieszak, Pablo Barbera, Annie Y. Chen, Hunt Allcott, Taylor Brown, Adriana Crespo-Tenorio, Drew Dimmery, Deen Freelon, Matthew Gentzkow, González-Bailón, Andrew M. Guess, Edward Kennedy, Young Mie Kim, David Lazer, Neil Malhotra, Devra Moehler, Jennifer Pan, Carlos Velasco Rivera, Daniel Robert Thomas, Rebekah Tromble, Arjun Wilkins, Beixian Xiong, Chad Kiewiet de Jonge, Annie Franco, Winter Mason, Natalie Jomini Stroud, Joshua A. Tucker. **"Like-Minded Sources on Facebook Are Prevalent but Not Polarizing."** *Nature* 620, 137–144. (2023) https://doi.org/10.1038/s41586-023-06297-w

Erlich, Aaron, Thomas Soehl, and <u>Annie Y. Chen</u>. **"Discriminatory Immigration Bans Elicit Anti-Americanism in Targeted Communities: Evidence from Nigerian Expatriates."** *Journal of Experimental Political Science* 10(1): 76–87. (2023) https://doi.org/10.1017/XPS.2021.26

Research Reports

<u>Chen, Annie Y.</u>, Brendan Nyhan, Jason Reifler, Ronald E. Robertson, and Christo Wilson. (Feb. 2021) **"Exposure to Alternative & Extremist Content on YouTube."** *Anti-Defamation League.*
https://www.adl.org/resources/reports/exposure-to-alternative-extremist-content-on-youtube/

Carey, John M., Gretchen Helmke, Brendan Nyhan, Susan Stokes, <u>Annie Y. Chen.</u> (Feb. 2021) **"American democracy at the start of the Biden presidency."** *Bright Line Watch.*
http://brightlinewatch.org/american-democracy-at-the-start-of-the-biden-presidency/

Carey, John M., Gretchen Helmke, Brendan Nyhan, Susan Stokes, <u>Annie Y. Chen.</u> (Nov. 2020) **"A Democratic Stress Test — The 2020 Election and Its Aftermath."** *Bright Line Watch.*
http://brightlinewatch.org/a-democratic-stress-test-the-2020-election-and-its-aftermathbright-line-watch-november-2020-survey/

Carey, John M., Gretchen Helmke, Brendan Nyhan, Susan Stokes, <u>Annie Y. Chen.</u> (Oct. 2020) **"American Democracy on the Eve of the 2020 Election."** *Bright Line Watch.*
http://brightlinewatch.org/american-democracy-on-the-eve-of-the-2020-election/

Education

B.A., Political Science & Criminology
University of Toronto (Toronto, Canada)
2013-2017, GPA: 3.8/4.0

M.A., Political Science
McGill University (Montreal, Canada)
2018-2020, GPA: 4.0/4.0

Programming & Software

Advanced: `R`; `Python`

Intermediate: `Git`/GitHub; `Javascript`; Unix/Linux

Elementary: `Stata`; `SQL`; `C++`; Amazon Web Services (AWS S3/RDS/EC2); High Performance Computing (HPC)

Teaching Assistance

- Graduate-level course: Causal inference (Randomization Inference, Matching, Difference-in-Differences, Regression Discontinuity Design, Instrumental Variables)
- Undergraduate-level course: Intro to quantitative methodology in Political Science
- Workshops: Math bootcamp (Calculus I, Probability, Linear Algebra); Programming and Data analysis (R)

Awards & Distinctions

- NIJ Innovations in Measuring Community Perceptions Challenge (2023) - $25,000
- Bright Line Watch Fellowship (2020-2021) - $38,200
- SSHRC Canada Graduate Scholarship (2018-2019) - $17,500
- Ontario Graduate Scholarship (2018-2019) - $10,000
- Centre for the Study of Democratic Citizenship Scholarship (2018) - $2,500
- Woodsworth College Wilcox Travel Abroad Award (2016) - $1,800