

Research Interests

Computational Social Science, Political Methodology, Political Economy of Information

- Methodological: machine learning, large-scale data processing, natural language processing, causal inference
- Substantive: social media, digital trace data, voting and elections, censorship & information control

Education

PhD Candidate in Political Science University of California, San Diego 2018–2023 (expected)

- Courses: CSE 250A Principles of AI, CSE 258 Rec Sys, Causal Inference, Bayesian Methods,... GPA 3.9/4.0
- Committee: [James Fowler](#), [Molly Roberts](#) (Chairs), [John Ahlquist](#), [Seth Hill](#), [Kirk Bansak](#)

BA & MA in Economics National Taiwan University 2011–2015

- Courses: Statistical Inference, Real Analysis, Linear Algebra, Econometric Theory,... GPA: 4.30/4.30

Experiences

Summer Institute in Computational Social Science at Princeton University 2019/6

- Highly-selective & funded two-week workshop, collaborate with other PhD researchers on data science projects
- Run real-time field experiments to randomize which platform participants watch Presidential Primary debates

Teaching Assistant & Project Mentor for [Halçioğlu Data Science Institute](#), UC San Diego 2020/1–present

- Mentor and advise data science majors on the direction and practices of data analysis for their final-year capstone projects

Research Assistant for Professor [John Ahlquist](#), UC San Diego 2021/6–present

- Run targeted Facebook ads to recruit respondents for survey experiment that work for specific companies on job security

Projects & Research

3. [Chang, K.-C., Hobbs, W., Roberts, M., & Steinert-Threlkeld, Z. "Crisis is a Gateway to Censored Information: The Case of Coronavirus in China", *Proceedings of the National Academy of Sciences*, Accepted.](#)

- **Data Processing:** Collect and process millions of geolocated Tweets, follower profiles, and human mobility data
- **Data Analysis:** Conduct statistical modeling to compare the change in followers from China vs. Hong Kong
- **Finding:** Covid crisis motivates Chinese netizens jump the Great Firewall and follow sensitive Twitter accounts

2. [Chang, K.-C., Chiang, C.-F., & Lin, M.-J. "Using Facebook Data to Predict the 2016 U.S. Presidential Election", *PLoS One*, Accepted.](#)

- **Data Processing:** Process billions of likes on popular Facebook pages to create affiliation matrix between pages
- **Dimension Reduction:** Develop Python scripts to reduce dimension of the data & measure ideology of pages & users
- **Finding:** Dimension reduction from engagement counts for politicians & popular pages on Facebook can predict election outcomes and are correlated with state-level polls over time

1. [Asbury, V., Chang, K.-C., McCabe, K., Munger, K., & Ventura, T. "The Effect of Streaming Chat on Perceptions of Debates", *Journal of Communication*, Accepted.](#)

- **Field Experiment:** Recruit respondents on MTurk and assign them to watch Primary debates on different platforms
- **Data Collection:** Scrape and analyze textual data of comments on debate livestreams on Facebook, 538, and ABC
- **Finding:** Democrats assigned to debate livestreams report worse viewing experience, affects candidate evaluation

Skills, Professional Activities & Awards

Programming Python, R, SQL, BigQuery, Stata, Matlab, Git, \LaTeX

Referee *Political Analysis*

Awards National Taiwan University Dean's List * 5, Phi Tau Phi Award, Taiwan Social Sciences Exchange Scholarship, Taiwan Study Abroad Scholarship, UCSD Institute for Practical Ethics Data Analytics Fellowship