Si Wu 吴斯

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RESEARCH INTERESTS

Comparative politics, authoritarianism, political economy, development, gender, China, methodology

DISSERTATION & DISSERTATION COMMITTEE

"From Control to Choice: Women, Work, and Power in China's New Family Planning Regime"
Rachel Brulé (Chair), Joseph Fewsmith, Taylor Boas

COMPREHENSIVE EXAMS

Comparative Politics, Political Methodology (Passed in September 2022)

EDUCATION

- Boston University, PhD in Political Science, Boston, MA.   Expected May 2026
- Northeastern University, MA in Journalism, Boston, MA.   Jan. 2018 – May 2020
- Durham University, Postgraduate Certificate in Education, Durham, U.K.   Sept. 2016 – June 2017
- Imperial College London, BSc in Physics, London, U.K.   Sept. 2013 – June 2016

PUBLICATIONS

Geometry of Graph Partitions via Optimal Transport (October 2020). *SIAM Journal on Scientific Computing*. (With Tara Abrishami, Nestor Guillen, Parker Rule, Zachary Schutzman, Justin Solomon, and Thomas Weighill.) ArXiv: [1910.09618](#).
- Key words: political districting plans; partitions; optimal transport; network flows.

[Democrats 'went low' on Twitter leading up to 2018](#) (February 2019). *Roll Call*. (With Aleszu Bajak).
- Key words: Twitter data; sentiment analysis; machine learning; Senate candidates.

FELLOWSHIPS & AWARDS

Hariri Institute for Computing at Boston University, Graduate Student Fellow Award   2020
Boston University, Dean's Fellowship   2020-2021
Northeastern University, Graduate Student Scholarship   2018-2020

WORK EXPERIENCE

Teaching Fellow, Boston University   Sept. 2021 – Present
- Served as a Teaching Fellow for the following courses: Introduction to Comparative Politics; Introduction to International Relations; Data Science for Politics; Introduction to Public Policy.

Racial Policy Tracker, Center for Antiracist Research at Boston University   June 2021 – Aug. 2021
- Analyzed COVID mortality data with modelling techniques.
- Collected data on minority representation in U.S. politics.

Research Assistant, Boston University   July 2020 – Aug. 2020
- Researched for Professors Maxwell Palmer and Dino Christenson.
- Collected Twitter data, scraped the web, and analyzed districting plans and financial donations.

Data Visualization Intern, Harvard Data Science Initiative   Sept. 2019 – Dec. 2019
- Developed data visualizations to effectively communicate data science concepts.
- Helped with conference planning and website design for the Harvard Data Science Review Inaugural Symposium.

Data Science Research Fellow, MIT/Tufts University   June 2019 – Aug. 2019
- Researched for the Metric Geometry and Gerrymandering Group (MGGG Redistricting Lab).
- Coauthored "Geometry of Graph Partitions via Optimal Transport" in *SIAM Journal on Scientific Computing*.
- Compiled figures with census data and GIS shapefiles by applying math techniques such as Markov Chain Monte Carlo, multi-objective optimization, transport distances and network.
- Developed JavaScript projects for data visualization and outreach.

Researcher, Northeastern's School of Journalism   April 2018 – May 2019
- Collected Twitter and Reddit data with Python and R.
- Applied machine learning techniques on tweets from midterm election candidates to predict positive/negative sentiment.
- Wrote articles on machine learning, data journalism, and augmented reality.

Teaching Assistant, Northeastern University   Sept. 2018 – Nov. 2018
- Taught students how to write leads and nut graphs in news stories.
- Assisted students on Associated Press style of writing and grammar.

CONFERENCE & WORKSHOP PRESENTATIONS

The Empirical Study of Gender Research Network (EGEN)   Sept. 2022
Harvard-MIT-BU Chinese Politics Research Workshop   April 2022
Northeastern University Visualization Consortium (NUVis)   Dec. 2018

SERVICE

Harvard-MIT-BU Chinese Politics Research Workshop   2022 – Present
- Coordinator

Hariri Institute for Computing, Boston University   2020 – 2022
- "Did you know you could…?" series co-coordinator and host

MEDIA COVERAGE

Hariri Institute for Computing News, Boston University   April 2021

- "Graduate Student Fellow Hopes to Apply Data Journalism Skills to Study Inequalities"

College of Arts, Media and Design News, Northeastern University   Nov. 2019
- "Si Wu, Journalism Graduate Student, Uses Data to Help Others Understand Political Redistricting"

News@Northeastern, Northeastern University   March 2019
- "Democrats who won 2018 midterms were more negative than Republicans on Twitter, research finds"

SKILLS

- Languages: English (fluent), Chinese (native), Korean (beginner).
- Computing Skills: Python, R, GIS, JavaScript, HTML, CSS, and LaTeX.
- Software: GitHub, Microsoft Office, Final Cut Pro, Adobe Premier, WordPress, Tableau.