## Si Wu 吴斯

### siwu1@bu.edu | Personal website

### 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 (\*denotes funding not included in the standard PhD package)

Boston University Graduate School of Arts & Sciences, Graduate Research Abroad Fellowship (\$6,000)*	2023
Boston University Global Development Policy Center, Summer in the Field Fellowship (\$6,000)*	2023
Boston University Hariri Institute for Computing, Graduate Student Fellowship (\$7,500)*	2020
Boston University, Dean's Fellowship	2020-2021
Northeastern University, Graduate Student Scholarship (\$12,897)	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.

# Updated September 2023

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**

Midwest Political Science Association (MPSA)	April 2023
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

Graduate School of Arts & Sciences, Boston University

July 2023

• "Doctoral students return home for summer research"

# Updated September 2023

# Hariri Institute for Computing, Boston University

April 2021

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

# College of Arts, Media and Design, 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, Final Cut Pro, WordPress, Tableau.