# 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 Birth 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.

• Northeastern University, MA in Journalism, Boston, MA.

• Durham University, Postgraduate Certificate in Education, Durham, U.K.

• Imperial College London, BSc in Physics, London, U.K.

Expected May 2026

Jan. 2018 - May 2020

Sept. 2016 – June 2017

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

Boston University, Dean's Fellowship

Northeastern University, Graduate Student Scholarship

2020-2021

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, multiobjective 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.