

Si Wu 吴斯

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RESEARCH INTERESTS

American politics, race and class, political behavior, public opinion, media, immigration, data science

EDUCATION

- Boston University, PhD in Political Science, Boston, MA. Expected May 2025
- 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 (\$7,500)	2020
Boston University, Dean’s Fellowship	2020-2021
MGGG Redistricting Lab, Summer Research Stipend (\$5,000)	2019
Northeastern University, Graduate Student Scholarship (\$12,897)	2018-2020

WORK EXPERIENCE

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 obituaries and leads and nut graphs in news stories.
- Graded homework.
- Assisted students on Associated Press style of writing and grammar.

PRESENTATIONS

Northeastern University Visualization Consortium (NUVis)

Dec. 2018

SERVICE

Hariri Institute for Computing, Boston University

2020 – 2021

- “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).
- Computing Skills: Python, R, GIS, JavaScript, Machine Learning, HTML, CSS, and LaTeX.
- Software: GitHub, Microsoft Office, Final Cut Pro, Adobe Premier, WordPress, Tableau.