Si Wu

siwu1@bu.edu | LinkedIn: Si Wu

EDUCATION

• Boston University, Ph.D. in political science, Boston, MA.

Expected May 2026

• Northeastern University, M.A. in journalism, GPA: 3.75, 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

- Languages: English (fluent), Mandarin and Cantonese (native).
- Computing Skills: Python (expert); JavaScript, Machine Learning, HTML, CSS, R, GIS, LaTeX and SQL.
- Software: GitHub, Microsoft Office, Final Cut Pro, Adobe Premier, WordPress, Tableau.

WORK EXPERIENCE

Data Visualization Intern, Harvard Data Science Review:

Sept. 2019 – Present

• Design and develop data visualization to effectively communicate data science concepts.

Data Science Research Fellow, MIT/Tufts University:

June 2019 - Aug. 2019

- Researched for the Metric Geometry and Gerrymandering Group, whose mission is to study applications of geometry and computing to U.S. redistricting.
- Coauthored "Geometry of Graph Partitions via Optimal Transport", a paper supervised by Justin Solomon at MIT.
- Compiled interpretable 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.

$Data\ Science\ Researcher,\ \textbf{Northeastern's}\ \textbf{School}\ \textbf{of}\ \textbf{Journalism}:$

April 2018 - Present

Sentiment analysis project -

- Results were published on Roll Call "Democrats 'went low' on Twitter leading up to 2018".
- Collected Twitter and Reddit data with Python and R.
- Applied machine learning techniques on tweets from midterm election candidates to predict positive/negative sentiment.

Airplane noise project -

- Researched and collected airplane noise data from various data sources, such as researchers and advocacy groups.
- Explored GIS tools such as Google Maps and laid out shapefiles in Python.

Writer, Northeastern's School of Journalism:

Aug. 2018 – Present

Write articles on digital storytelling, including machine learning, data journalism, augmented reality app and podcast.

Faculty Teaching Assistant, Northeastern University:

Sept. 2018 - Nov. 2018

- Taught classes on topics such as the writing of obituaries, leads and nut graphs in news stories.
- Assigned and graded homework.
- Assisted students in and outside of class on topics such as Associated Press style of writing and grammar.

PAST ACADEMIC EXPERIENCE

Computing projects, Imperial College London:

Sept. 2013 – June 2016

Python projects:

- Used data from type Ia supernova and statistical methods such as MCMC to estimate cosmological parameter values.
- Analyzed and presented graphs of motion and energies of a satellite travelling around Mars.
- Recorded and analyzed trajectories of rays propagating and refracting at boundaries between different medium.

Assembly project:

• Used assembly language to design a pong game on an oscilloscope.