

# Fangzhou Xie

## Education

Ph.D., Economics	Rutgers University	2020 – 2025
M.A., Economics	New York University	2018 – 2020
B.S., Economics	Capital University of Economics and Business	2013 – 2017
Visiting student	University of California, San Diego	2015 – 2016

## Research Interests

Econometrics with Machine Learning, Political Economy, Optimal Transport, MCMC, Natural Language Processing (NLP), Topic Modeling.

## Languages and Skills

Natural Languages: English (fluent), Mandarin Chinese (native), German (intermediate).

Operating Systems: macOS and Linux (Ubuntu + Fedora).

Programming Languages: R, Python, L<sup>A</sup>T<sub>E</sub>X, SQL (SQLite + MySQL), Matlab, Julia, Go, Rust, C/C++, Bash (basic).

Skills:

Data Analysis: Tidyverse, Tidymodels, NumPy, Pandas

Web Interacting: BeautifulSoup, Selenium, rvest

General Machine Learning: PyTorch, Keras

Natural Language Processing: AllenNLP, Spacy, Transformers

Database Management: sqlite3, SQLAlchemy, RSQLite, DBI

Typesetting: L<sup>A</sup>T<sub>E</sub>X, Rmarkdown, Markdown

High-performance: Rcpp, C++

## Publication and Proceeding

**Fangzhou Xie** (2020). Wasserstein Index Generation Model: Automatic generation of time-series index with application to Economic Policy Uncertainty. *Economics Letters*, 186, 108874. doi: 10.1016/j.econlet.2019.108874

*Abstract: I propose a novel method, the Wasserstein Index Generation model (WIG), to generate a public sentiment index automatically. To test the model's effectiveness, an application to generate Economic Policy Uncertainty (EPU) index is showcased.*

**Fangzhou Xie** (2020). Pruned Wasserstein Index Generation Model and *wigpy* Package. Accepted by CARMA 2020.

*An extension to WIG model that will deal with large corpus. Lasso was used to shrink the dimension of vocabulary, so that it could be easier to calculate the Optimal-Transport distance matrix.*

## Peer-Reviewed Conference Presentation

- 3rd Workshop on Mechanism Design for Social Good (MD4SG '19) at ACM Conference on Economics and Computation (EC '19), June 2019.

## Teaching and Research Experience

- TA for Professor Sahar Parsa, Econ-UA 266: Intro to Econometrics.
- RA for Professor Sahar Parsa, 2020.

## Membership

SIAM, AEA

## Awards

Excellence Fellowship, Department of Economics, Rutgers University, 2020–2025;

Travel Fund (\$860), 3rd Workshop on Mechanism Design for Social Good and Department of Computer Science, Cornell University, 2019;

Travel Fund (\$180), Department of Economics, New York University, 2019;

Travel Fund (\$1100), Department of Economics, Cornell University, 2017;

The first scholarship, Capital University of Economics and Business, 2016;

Full Scholarship for “Foreign Exchange Program”, UCSD, Beijing Municipal Government, 2015–2016;

The third scholarship, Capital University of Economics and Business, 2015;

The first scholarship, Capital University of Economics and Business, 2014;

The first prize, Knowledge Contest of Literature and History, CUEB School of Culture and Communication, 2014;

## Other Activities

Assistant Researcher, Research Unit, Center for China and Globalization (CCG), 2018.

*Scrape webpages and analyze data using Python, and conduct econometric research on human capital and talents with Stata.*

Intern, International Cooperation Department, Ministry of Justice of P. R. China, 2017.

*Under supervision of Deputy Director-General Xiaoming Zhang, help deal with Mutual Legal Assistance (MLA) requests, write correspondence letters to foreign and domestic authorities, translate documents, interpret during the conference, and handle administrative matters.*

Assistant to Director, Beijing Jianhao Law Firm, 2016.

*Hold meetings, attend moot court, do paperwork, and help provide a corporate client with legal service.*