# Fangzhou Xie

## Education

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|---|---|---|
| Ph.D., Economics | Rutgers University | 2020 — 2025 (expected) |
| 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, Natural Language Processing (NLP).

## Languages and Skills

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

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

Programming Languages: R, Python, Julia, LaTeX, C++, SQL (SQLite), Bash (basic).

Skills:

Data Analysis: Tidyverse, Tidymodels, NumPy, Pandas

Web Interacting: BeautifulSoup, Selenium, rvest, curl (R)

General Machine Learning: PyTorch, Keras

Natural Language Processing: AllenNLP, Spacy, Transformers

Database Management: sqlite3, SQLAlchemy, RSQLite, DBI

Typesetting: LaTeX, Rmarkdown, Markdown

Performance: Rcpp, RcppThread, C++

## Publications

**Fangzhou Xie** (2022). rethnicity: An R package for predicting ethnicity from names. SoftwareX, 17, 100965. doi: 10.1016/j.softx.2021.100965

*I built a package to predict ethnicity from names and published it on CRAN for R users.*
*Github repo: https://github.com/fangzhou-xie/rethnicity.*

**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.*

## Proceeding

**Fangzhou Xie** (2020). Pruned Wasserstein Index Generation Model and *wigpy* Package. 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 (Rutgers) for Intro to Macro and Money Banking Finance
- TA (NYU) for Professor Sahar Parsa, Econ-UA 266: Intro to Econometrics.
- RA (NYU) for Professor Sahar Parsa, 2020.

## 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;

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

Last updated: March 29, 2022