

# Fangzhou Xie

## Education

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, L<sup>A</sup>T<sub>E</sub>X, SQL (SQLite), 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

Performance: Rcpp, RcppThread, C++

## Publications

**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** (2021). Rethnicity: Predicting Ethnicity from Names. *Submitted to SoftwareX*. arXiv:2109.09228.

*I built a package to predict ethnicity from names and published it on CRAN for R users.*

## 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.

## 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;

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

Last updated: October 26, 2021