

# Rowan Shi

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## Summary

- socially-motivated research economist interested in big-picture humanitarian work
- strong statistical and technical skills, especially in causal inference methods and quantitative computing
- experienced communicator, from writing reports of all lengths, presenting research, and teaching classes
- enthusiastic collaborator enjoying teams or on partner projects such as co-authored papers
- detail-oriented and organized, resulting from self-directing projects and serving as a large lecture's course organizer

## Education

**PhD (expected) in Economics**, *Princeton University* 2020  
**BA in Mathematics and Economics**, *University of California, Berkeley* 2014

## Projects

**Evaluating tax harmonization policy in the European Union**, *with co-author* 2016 -

- designed structural general equilibrium model to predict the effects of tax reform
- fit the model to data on EU corporate taxes, national expenditure, and other aggregate variables
- wrote, deployed, and supervised distributed (parallelized) computational code on remote cluster in Julia

**An algorithm for fast optimization over a lattice**, *independent project* 2018 - 2019

- created and coded algorithm in Julia
- wrote documentation and gave presentations with usage demonstrations
- theoretically proved the algorithm is always accurate and applicable in many relevant settings
- conducted time trials to show it is 10x faster than existing methods in practice

**Brazil's tariff cuts and jobs in its nontraded sector**, *independent project* 2017 -

- manipulated worker panel administrative datasets (500M+ obs) in preparation for analysis
- devised and ran causal inference strategy incorporating binary outcome and selection correction analysis in R
- gave seminar presentations of findings that Brazil's tariff cuts created ~1M jobs in nontraded (service) industries

**Does education increase rural-to-urban mobility?**, *independent project* 2019

- integrated and operationalized 3 years of Honduras census data
- constructed and completed instrumental variable causal analysis of the role of education on adult outcomes in R
- concluded that each year of early education causes a 5-11 p.p. higher likelihood of living in a city as an adult
- wrote report detailing empirical process and results using R markdown and ggplot2

All projects are available at [rowanxshi.github.io](https://rowanxshi.github.io).

## Other experience

**Course organizer and teaching assistant**, *intro to microeconomics; intro to macroeconomics* 2018 -

- co-ordinated and oversaw team of ~5 teaching assistants and ~10 graders each semester
- maintained sensitive student grades information for problem sets, attendance, and exams (200+ student class)
- organized arrangements for meetings, exams, and students needing special accommodations
- prepared and gave weekly lectures covering new material to groups of ~20 students
- met with students individually to work through problem sets and answer questions

**Financial Research Analyst**, *Dominion Bond Rating Service* 2013

- assembled, analyzed, and synthesized data regarding public company pension plans
- contributed to writing report summarizing the state of defined contributions pension plans

## Skills

English, French, Mandarin Chinese	languages
R (data.table, dplyr, R markdown), Stata, MATLAB, Julia, LaTeX, CSS	scripting
yoga, baking desserts, photography, visual design, animals, enjoying spicy food	personal