

# Rowan Shi

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## 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
- concluded that Brazil's tariff cuts created ~1M jobs in nontraded (service) industries
- presented findings at seminars

**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 5-10 p.p. higher likelihood of living in a city as an adult
- wrote report detailing empirical process and results using R markdown and gglot2

## Other experience

**Course organizer**, *introduction to microeconomics* 2018 -

- coordinated and oversaw team of ~5 teaching assistants and ~10 graders
- maintained sensitive student grades information for problem sets, attendance, and exams
- organized arrangements for meetings, exams, and students needing special accommodations

**Teaching assistant**, *introduction to microeconomics; introduction to macroeconomics* 2016 - 2019

- prepared and gave weekly lectures covering new material to ~20 student classes
- 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

R (data.table, dplyr, R markdown), Stata, MATLAB, Julia, LaTeX, CSS  
English, French, Mandarin  
scripting  
language

## Personal

yoga, baking desserts, photography, french horn, spicy food  
Canadian  
interests  
citizenship