Rowan Shi

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Summary

- research economist seeking to create tangible positive social impact
- statistical and technical skills with causal inference, quantitative computing, and large administrative micro-datasets
- experienced communicator, from writing reports of all lengths, presenting research, and teaching classes
- enthusiastic collaborator, enjoying team or partner projects such as co-authored papers
- detail-oriented and organized, 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

Research Projects

Evaluating tax harmonization policy in the European Union, *with co-author*   2016 -
- predicted the effects of tax reform using mathematical simulation modelling (structural general equilibrium)
- fit the spatial model to data on EU corporate taxes, national expenditure, and other aggregate variables
- wrote, deployed, and supervised distributed (parallelized) computational code on 16-core remote cluster in Julia

An algorithm for fast optimization over a lattice, *independent project*   2018 - 2019
- slashed computational time by 10-100x by creating new algorithm
- designed and implemented new algorithm in Julia
- wrote documentation and gave presentations with usage demonstrations
- theoretically proved the algorithm is always accurate and applicable in many relevant settings

Brazil's tariff cuts and jobs in its nontraded sector, *independent project*   2017 -
- operationalized 10 years of worker panel administrative datasets (500M+ obs) for analysis
- concluded that Brazil's tariff cuts created ~1M jobs in nontraded (service) industries, using causal inference strategy incorporating binary outcome and selection correction analysis in R
- gave seminar presentations of findings

Does education increase rural-to-urban mobility?, *independent project*   2019
- merged 3 years of spatial Honduras census data (IPUMS)
- designed and completed instrumental variable causal analysis of school's role 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 for general audiences, describing quasi-experimental design and results using R markdown and gglot2

All projects are available at rowanxshi.github.io.

Other experience

Course organizer and teaching assistant, *Princeton University*   2018 -
- managed team of ~5 teaching assistants and ~10 graders, co-ordinated with professor and university administration
- prepared and gave weekly lectures covering new material to groups of ~20 students
- met with students individually to answer questions and work through problem sets

Financial Research Analyst, *Dominion Bond Rating Service*   2013
- assembled, analyzed, and synthesized data on pension plans fo 500 public companies
- wrote report for company clients, summarizing the state of defined contributions pension plans

Skills

causal inference (e.g. instrumental variables, RDD), (multi-level) linear regression, logit/probit models	stats
English, French, Mandarin Chinese	languages
R (data.table, dplyr, R markdown), Stata, MATLAB, Julia, Git, LaTeX, CSS, Slurm	scripting
yoga, baking desserts, photography, visual design, spicy food	interests