Rowan Shi

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Placement Director: Steve Reddingreddings@princeton.edu • (609) - 258 - 4016Graduate Administrator: Laura Hedden1hedden@princeton.edu • (609) - 258 - 4006

Fields

International trade, Spatial and Urban Economics Industrial Organization, International Macroeconomics Primary Secondary

2014 -

Education

PhD candidate in Economics, Princeton University

Thesis title: International trade with heterogeneous firms and reallocation $% \left(1\right) =\left(1\right) \left(1\right$

Expected completion: June 2020

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BA in Mathematics and Economics, University of California, Berkeley Highest Honors in Economics, Distinction in General Scholarship 2009 - 2014

Job market paper

Solving combinatorial discrete choices in heterogeneous agent models: theory and an application to corporate tax harmonization in the European Union

with Kathleen Hu

This paper develops a solution method for computing optimal decisions to combinatorial discrete choice problems (CDCPs) in heterogeneous agent settings. With an arbitrary type distribution over any number of differentiated characteristics, it quickly computes the policy *function* mapping the entire type space to corresponding optimal actions. The binary decisions can display either supermodular or submodular interactions. Problems of this structure arise naturally in economic settings, especially in international trade and industrial organization. The proposed algorithm is particularly well suited for estimating or computing general equilibrium models incorporating heterogeneous agents solving CDCPs, including choices on plant locations, input sourcing partners, or export market entry. As an illustration of the algorithm in practice, the paper then turns to evaluating the effects of a counterfactual policy equalizing corporate tax rates across the European Union using a quantitative general equilibrium model where heterogeneous firms optimally select a set of countries in which to operate affiliates.

Works in progress

 ${\it Brazil's import\ liberalization\ and\ reallocation\ in\ its\ non-traded\ sector}$

Awards and fellowships

Summer Fellowship, International Economics Section, Princeton University Doctoral Fellowship, Princeton University	2016 - 2019 2014 - 2020
Teaching	
Course organizer, Introduction to microeconomics, Prof. Kelly Noonan	2018 - 2020
Course organizer, Introduction to microeconomics, Prof. Henry Farber	2019
Teaching assistant, Introduction to microeconomics, Prof. Kelly Noonan	2018
Teaching assistant, Ethics and economics, Prof. Thomas Leonard	2017
Teaching assistant, Introduction to macroeconomics, Prof. Elizabeth Bogan	2016 - 2017
Research experience	
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Research assistant, Prof. Oleg Itskhoki	2015
Research assistant, Prof. Mark Aguiar	2014
Research assistant, Prof. Yuriy Gorodnichenko	2013