# Junyi Hou

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#### **EDUCATION**

## University of California, Berkeley, Ph.D. Economics

2015-2021 (expected)

- Dissertation: Essays in Development Economics and Political Economy
- References: Prof. Gérard Roland (chair); Prof. Andrés Rodríguez-Clare; Prof. Yuriy Gorodnichenko
- Ning Fellowship, 2015-2017, Doctoral Completion Fellowship, 2020

# London School of Economics, MSc. Econometrics and Mathematical Economics

2013-2014

• Graduate with distinction, Ely Devons Prize (top of the class)

Nankai University, Bachelor in Economics (with minor in Applied Mathematics)

2009-2013

• Finalist for Best Undergraduate Thesis, 2013, First-Class Outstanding Student Scholarship, 2011; 2012

## SKILLS & TOOLS

Causal Inference, Structural Estimation, Experiment Design; Python, SQL, Linux, Bash, Git, STATA, LaTeX, elisp

#### **EXPERIENCE**

Uber, Inc., Data Scientist II (part-time); Data Scientist Intern

2019-2020

Business Economics Team (manager: Dan Knoepfle)

## Understanding drivers' responses to promotion programs

- Modeled drivers' selections and subsequent labor supply based on earnings and promotion schedules, estimated drivers' earning distribution non-parametrically, predicted drivers' participation and labor supply consistently
- Informed cost-benefit analyses of the largest driver promotion product in over 100 cities in the U.S. Addressed concerns in low participation and completion rates in the promotion product.

## Estimating drivers' labor supply under non-linear compensation scheme

- Developed a structural model to predict labor supply of drivers facing non-linear compensation schedules, explained observed empirical pattern with estimated driver reservation wage
- Presented in policy economics group and cross-function teams

## Evaluating the driver promotion program at the individual level

• Recovered distribution of treatment effect by exploiting variations in the same driver's exposures to both control and treatment arms in repeated A/B tests

#### ACADEMIC WORKS

#### Can State Capitalism Promote Innovation? Evidence from China

Job Market Paper

- First paper to structurally estimate the welfare loss from political connections distorting firms' R&D decisions
- Showed, through an endogenous growth model, heterogeneous factor market access creates a wedge in return to innovation and potentially resource misallocation in the R&D sector
- Estimated the model via a simulated method of moment estimator on large scale Chinese firm-level dataset
- Found the productivity growth in China is 1.2 percentage point lower (3.8% instead of 5.0%) due to privileges of inefficient but politically connected firms, which leads to 23% lower welfare.

### Political Connection, Financial Frictions, and Allocative Efficiency

Work in Progress

- Studied how financial frictions affects allocative efficiencies across manufacturing firms in China
- Identified a specific source of resource misallocation, namely the political connectedness of firms. Showed politically connected firms have better access to bank credits despite lower profitability and more defaults before the reform
- Showed the 2004 Chinese banking reform improved allocative efficiency over 20% using a diff-in-diff design, and that this improvement is mostly due to expansions of politically unconnected firms gaining access to credit after the reform

### UC Berkeley; Standford University; Centre for Economic Performance

2014: 2015: 2016-2017

Research Assistant to Prof. Peter Lorentzen, Prof. Dave Donaldson, Prof. Silvana Tenreyro

• Replicated empirical studies (Romer and Romer 2004; Uhlig 2005a, 2008); cleaned and managed large data sets (CEX, CEPII Trade); wrote numerical GE solvers (Allen, Arkolakis and Takahashi 2014)

## **IMMIGRATION STATUS**

Citizenship: China, Visa Status: F1, U.S. permanent residency expected in December 2020.