# Xincheng Qiu

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## Education

Ph.D. Candidate in Economics, University of Pennsylvania.

Research Interest: Macro and Labor Economics

M.A. Economics (*with highest distinction*), Peking University, 2017.

B.A. Economics and B.S. Mathematics (*with highest distinction*), Peking University, 2015.

## Research

### *Work in Progress*

"Golden Ages": A Tale of Two Labor Markets, with Hanming Fang

The Geography of Job Creation and Job Destruction, with Moritz Kuhn and Iourii Manovskii

Automation and Labor Market Sorting

## Honors

Joel Popkin Graduate Student Teaching Prize in Economics, University of Pennsylvania, 2019.

Lawrence Robbins Prize in Economics (*for the best first-year student*), University of Pennsylvania, 2018.

## Professional Experience

### *Referee Service*

*International Economic Review*

### *Conference Presentations*

2020: Knee Center Occupational Regulation Conference, CES North America Conference

### *Completed Ph.D. Courses*

Microeconomic Theory (I & II), Macroeconomic Theory (I & II), Econometrics (I, II & III), Economic Growth, Economics of Labor, Labor, Health & Family, Search Theory & Applications, Quantitative Macroeconomic Theory, Empirical Methods For Counterfactual Analysis, Empirical Industrial Organization, Public Economics, Topics in Applied Micro.

I feel honored to attend the NBER Young Scholars Workshop on the Economics of Artificial Intelligence last year physically in Toronto. I have learned so much from the workshop and the conference, and I am thrilled at the opportunity to apply again now, although somewhat sadly, this year's workshop is going virtual.

My current research studies the labor market effects of automation from the perspective of sorting. First, I document that workers in jobs with higher exposure to robots suffer from higher separation risks. This finding is consistent with Acemoglu and Restrepo (2020), who provide commuting-zone level evidence on the negative effects of robots on employment and wages. Second, I take a step further and ask where do the separated workers go. Do they stay nonemployed forever? The answer is no. Strikingly, they have a similar probability of going back to employment after one year from separation. A natural question is what kind of jobs do they take when they return to the labor market. I find that they are more likely to work in occupations with higher cognitive and interpersonal skill requirements, but lower manual skill requirements.

These empirical facts motive the theory, building on the state-of-the-art formulation of sorting in a frictional labor market due to Shimer and Smith (2000). The novelty of this paper is to introduce further the role of automation modeled as the process that tasks previously performed by labor are gradually taken by machines, credited to Acemoglu and Restrepo (2018). This process leads to a reallocation of workers across jobs and brings labor market mismatch. The resorting of labor, however, also changes firms' job creation motives, which partly offsets the negative effects. I quantitatively study how automation affects the labor market mismatch through the two channels.