Statement of Purpose

Robin Liu

I want to pursue a career in economic research. I believe economists uncover valuable insights about the economy and help policymakers make more informed decisions.

During my time at Georgetown as an undergraduate, I took 1st year PhD economics coursework in microeconomics, macroeconomics, and econometrics. I also took graduate level math courses covering measure theory, functional analysis, and statistics.

I gained research experience working for professors and graduate students at Harvard Business School, MIT, Sciences Po, Georgetown, and the Federal Reserve System. Some of my research tasks involved estimating impulse response functions using local projections and SVARs, using a web search API to scrape company-level data, and computationally solving New Keynesian models.

My research interests are in macroeconomics. I have worked on three independent research projects that demonstrate my capacity for pushing the frontier of macroeconomics. These projects are at my personal website (https://robinliuecon.github.io/). Here are descriptions of my work:

- 1. In my senior thesis, I studied the effects of a federal policy that banned welfare for non-citizens. I constructed a search model with heterogeneous labor markets and used a triple-differences approach to see if the predictions of the search theory matched the empirical results. I presented this thesis at the Carroll Round, an undergraduate economics conference that I also helped run as the Steering Committee Chair.
- 2. I wrote another independent research paper during my time as a RA for the San Francisco Fed. This paper studied the geography of credit markets. For my analysis, I augmented a frictional DMP credit and labor market with heterogeneous locations.
- 3. My third independent research project is in its early stages and tries to understand what generates the distribution of retirement ages in the macroeconomy. To answer this question, I am using stochastic control to model retirement decisions as stopping time problems.

I would like to attend a PhD economics program with strong faculty to support me on my research journey. Thank you for considering my application.