Research Statement
Tao Song

I am interested in contributing to a deeper understanding of the relationship between local economic development and immigrant labor market outcomes. I believe that the beauty of economic research is its intricacy and accessibility. With this in mind, I strive to understand economic problems through rigorous empirical analyses that are guided by solid theoretical foundations.

Background
As an international student from China who has spent his entire post-secondary education in Canada and the U.S., I was provided with a unique experience of observing and experiencing the effect of local economy’s impact on immigrants and international students.

The world went into the great recession in the late 2000s when I was finishing up my undergraduate studies in University of New Brunswick in Canada. While I was preparing for my graduate school application, I noticed how the recession could affect my colleagues and peers in their career choices. There was a sudden pessimism in the job search prospects accompanied by a spike in the interest in graduate studies to “just to wait out the storm”. Moreover, the increased number of my Chinese colleagues who moved back to China as soon as they obtained their degrees gave me a first-hand experience on how economic realities could significantly affect a foreign student’s immigration decisions.

Later, I moved to the energy-rich province of Alberta, Canada to pursue my Masters in Economics degree at University of Alberta. I arrived during the tail end of world oil price hike, so I was “lucky” to witnessed how Edmonton economy and its labor market went through a boom and a bust in the matter of several years simply because of oil price fluctuations. Converting my interest in the subject matter into empirical research, I collaborated with Dr. Joseph Marchand and studied the effect of energy boom in the early-to-mid 2000s on the Albertan local labor market. We offered our caution that there could be a potential labor shortage of the highly demanded category of labor input in energy production: trade and apprenticeship graduates if another energy boom were to happen in the future. This analysis was published in a special report titled “An Examination of Alberta Labour Markets” under the Institute of Public Economics in University of Alberta. This was my first experience in writing an academic research paper for the audience outside of the world of professional economic study. As a result, I have obtained valuable information on how to connect and convey the importance of economic studies to the general public.

In addition, using my family’s experience during the Chinese economic reform in the 1980s and 1990s, I collaborated with Hang Gao, and Dr. Joseph Marchand and published a paper analyzing Chinese urban workers’ increases in real earnings at the turn of the 21st century. We found that the increases in relative earnings were not uniformly experienced across groups with a strong favoring towards males, more educated workers, and younger workers. By applying the
empirical framework of Katz and Murphy (1992) and using an innovative categorization method of separating State-owned Enterprises (SOEs) from private firms, we analyzed these relative earnings increases with respect to the relative supply and demand changes for each of these imperfectly substitutable labor inputs. We found that the relative labor supply changes were consistent with the relative earnings increases across all of the experience groups, but they were not consistent across gender or education groups. On the other hand, only the relative demand movements were consistent across education groups, and neither of the movements could help explain the gender differences. When the paper was published in *Comparative Economic Studies* in 2013, there was a lack of research on rigorous demand/supply mechanism studies on urban labor market in mainland China, this paper was the first to fill that gap.

In late 2012, I moved to Connecticut to pursue my Ph.D. degree. Since the U.S. economy steadily recovered during the past four years as I continued my studies and research, it was interesting to see how a growing number of my colleagues in the department decided to pause their graduate studies in order to pursue business opportunities. Interesting, the Chinese economy went into a stagnation period during the same time. As a result, the number of my friends and peers who originally left Canada to work in China in the late 2000s unsurprisingly started to ask me about potential opportunities in work and graduate studies in the U.S. again.

The personal experience on how the economic situation could affect the local labor market outcomes and myself being an immigrant eventually became the important catalyst on the design of my doctoral dissertation “Three Essays on Immigrants’ Socio-Economic Integration in the United States”. As the connection between economic transitions with immigrants’ local labor market realities is apparent throughout the research.

**My Dissertation**  
**“Three Essays on Immigrants’ Socio-Economic Integration in the United States”**  
The United States is one of the most popular destinations among immigrant-receiving countries because of its policies permitting high-immigrant intake numbers and opportunities for permanent settlement. However, a trend of slowed economic and social integration of immigrants becomes evident in the recent decades.

My dissertation investigates immigrants’ social-economic integration trends via several aspects. The first essay connects the increasing native-immigrant wage gaps since the 1980s with the increasing price of social skills induced by the skill biased technological change in the United States. The second essay studies why people live in ethnic enclaves. I look at how internal migration patterns and wages of native-born co-ethnics changed in response to the changes in the size of ethnic enclaves caused by exogenous immigration surges. The third chapter studies the increasing wage premiums of intermarried immigrants since the 1980s, and suggests that an increase in price of English language skills and social skills contributed to the increase in the wage premiums.
Summary of Essay 1:
“Honey, Robots Shrunk My Wage! Native-Immigrant Wage Gaps, Social Skill Price, and Skill Biased Technological Change”
The gap between native and immigrant wages in the U.S. has increased significantly since the 1980s. While part of this may be attributable to declines in the relative quality of immigrant labor, this paper explores whether skill price changes induced by skill biased technological progress also played a role. Using historical routine employment share to measure cities’ likely technology adoption, I show that local labor markets that specialized in routine tasks experienced differential increases in native-immigrant wage gaps. This is consistent with the hypothesis that native workers have better labor market outcomes because they have a comparative advantage in U.S.-specific social skills, and the returns to these skills have increased as a result of technological development. Results do not seem to be driven by selective migration between cities but are strongly related to immigrants’ English language abilities as well as other measures of their social assimilation.

Summary of Essay 2:
“Why Live in an Ethnic Enclave? Domestic Migration Responses to Immigration Surges”
There are both monetary and non-monetary reasons for immigrants’ decision to live in ethnic enclaves. From a monetary perspective, ethnic networks might provide more or higher quality information about job opportunities as well as about how to access public assistance programs. Non-monetary factors include linguistic convenience and social-cultural preferences such as ethnic religious institution and ethnic schools. Potential costs for these non-monetary benefits could be lower wages and slower social and economic integration. This paper sidesteps the endogeneity problems associated with immigrants’ residence location choices by analyzing the migration responses of native born to exogenous immigration shocks that affect ethnic communities. I also utilize a novel instrument of the GDP of immigrants’ home countries to measure the immigration surges of each ethnic group. My results show that an immigration surge in a city could encourage the co-ethnic native born who already live in that city to remain there, in order to take advantage of the increased non-monetary benefits. On the other hand, the same immigration surge also repels co-ethnic residents from other cities to move towards the landing city, possibly due to higher potential moving costs and monetary sacrifices.

This paper has been accepted for a seminar presentation in the 86th Annual Meeting of the Southern Economic Association.
Summary of Essay 3:
(Published in The ANNALS of the American Academy of Political and Social Science, 662(1), 207-222. 2015)
Previous studies show that immigrants to the United States married to natives earn higher wages than immigrants married to other immigrants. Using data from the 1980 to 2000 U.S. censuses and the 2005 to 2010 American Community Surveys, we show that these wage premiums have increased over time. Our evidence suggests that the trends are unlikely to be explained by changes in the attributes of immigrants who tend to marry natives but might instead be a result of changes in how these attributes are rewarded in the labor market. Because immigrants married to natives tend to have more schooling, part of the increasing premium can be explained by increases in the value of a college education. We find, however, that even when allowing the value of education and English-speaking ability to vary, intermarriage wage premiums have increased over time. We believe these patterns might be driven by changes in technology and globalization, which have made communication and management skills more highly rewarded in the U.S. labor market.

Other Publications and Works
I am also currently collaborating with my colleague at University of Connecticut, Tian Lou, in a research paper. We attempt to understand the differential impact of ethnic segregation on immigrants’ labor market outcomes across education groups. Our preliminary results find that ethnic segregation’s positive effect on an immigrant’s labor market outcome is closely related to the good match between the immigrant’s own education level and their ethnic enclave’s average education level. The paper, titled “Ethnic Segregation, Education, and Immigrants’ Labor Market Outcomes” is also Tian’s job market paper.

Future Plans
In the years to come, I plan to continue pursuing research on immigrants’ labor market outcomes, with a particular focus on social interaction and assimilation. I would like to identify a refugee and immigrant placement strategy so that immigrants could assimilate into the local economy more efficiently, and therefore realize the benefits associated with immigration faster.

I would also like to identify the technology’s impact on people’s immigration decisions. Specifically, I would like to study whether and how new technology that continues to blur nations’ economic boundaries could influence people’s decisions to leave their home countries to work somewhere else.

In addition, I would like to go back to the research topics I have done as a master’s student and study labor market in China and the relationship between energy market and labor market.
Concluding Remarks

My record of continuous research on the relationship between economic situation and labor market trends shows my passion for the subject matter. My continuous publications demonstrate my drive to become a productive researcher. My experience on utilizing various data sets from multiple countries displays my broad knowledge on the empirical research skills. While I understand that it is dangerous to rely on anecdotal events for research, I believe that grounding my scientific rigorous research by my real life experience of studying and working in several countries is perhaps my best asset in providing insightful and relatable academic analyses.