Neha Betai

Ph.D. Candidate in Economics, George Washington University
nehabetai96@gwu.edu
+1-202-578-2669

Graduate Study

I am a Ph.D. Candidate in Economics at the George Washington University, enrolled since 2021. My fields of specialization are International Trade, Labour and Development. My research examines how digital technologies, particularly generative artificial intelligence (AI) and online labor platforms, are transforming the nature of work, and outsourcing of services in the global economy. I expect to complete the Ph.D. program in 2027.

My doctoral coursework and research training emphasize microeconometric methods, causal inference, and data-intensive empirical analysis. I have extensive experience with Python, R, and STATA for econometric modeling, large-scale data management, and machine learning applications. My training has also included courses in applied microeconometrics, industrial organization, and international trade.

Dissertation and Current Research

Dissertation Title: *Generative Artificial Intelligence and the Global Labor Markets*

Committee: Maggie X Chen, Chair, Alessandra Fenizia, Rodimiro Rodrigo

My dissertation research looks at the impact of artificial intelligence on labour markets, governance, and international outsourcing of services. Using high frequency transaction level data from a large digital labour market, in collaboration with Prof. Maggie Chen, I examine the changes in demand for labour, value of jobs and reskilling decisions of workers in developing countries after the launch of GPT 3.5. This paper leverages high frequency data in over 2700 diverse skills from an online labour market to provide empirical evidence on how generative AI is transforming international service outsourcing, by altering both firms' global sourcing decisions and workers' skill choices. Leveraging large language models, we constructed a custom database that measures skill-level exposure to emerging AI capabilities.

To complement this work, I am conducting a survey on the public attitudes towards AI technologies, their application in policy making and regulation. The goal is to examine perceptions of risk, fairness, and trust across demographic and occupational groups in developing economies. It aims to provide empirical evidence on how individuals understand and

evaluate AI's potential impact on employment, privacy, and inequality, with implications for the design of inclusive technology policy in developing economies.

Together, these projects provide a comprehensive understanding of how AI adoption shapes labour markets and demand for regulation in developing economies.

Research and Professional Experience

From 2019 to 2021, I worked as a Research Assistant at the Indian Institute of Management Bangalore under the supervision of Dr. Rupa Chanda, where I contributed to projects on the UK–India Trade in Services and the Regional Comprehensive Economic Partnership (RCEP). In this role, I conducted econometric analysis using STATA, compiled and cleaned data from multiple sources, and supported background research for reports commissioned by the UK Department for International Trade and the Ministry of Commerce, Government of India. I also pursued independent research on global value chains and international migration, co-authoring papers such as "Implications of Brexit for Skilled Migration from India to the UK" and "Global Value Chain Participation and Intermediate Export Sophistication." These experiences strengthened my ability to integrate empirical analysis with policy-relevant economic research.

Earlier, as a Research Intern at the National Bank for Agriculture and Rural Development (NABARD) in Mumbai during the summer of 2018, I designed and implemented a field research project on cash flow and credit-related aspects of agricultural households in Gujarat's Surat and Tapi districts. I developed survey instruments, supervised data collection, conducted qualitative and quantitative analysis, and presented my findings to senior executives. This work gave me first-hand exposure to the links between financial inclusion, agricultural development, and digital financial infrastructure.

Throughout my PhD, I have served as a Teaching Assistant for undergraduate principles courses and Advanced International Economics course, and I have also been an instructor for undergraduate microeconomics.

Research Interests and Future Directions

My broader research interests lie in international trade, particularly in services, the labor market implication of automation, and governance of emerging technologies. I am particularly interested in how advances in artificial intelligence reshape global production networks, and influence the changes in the skill profile of workers. Building on my current work, I aim to study how technological change prompts workers to adapt their skill profiles, the constraints they face in doing so, and how these adjustments differ across countries and demographic

groups. I also plan to examine how individuals interact with AI systems in settings such as job search and recruitment, and whether AI tools can help alleviate informational frictions in the application process.

In addition, I want to extend my research to examine individual-level decisions around data sharing and participation in AI training, including how people value their personal data, and how they weigh privacy concerns against economic incentives.