Application for NBER Digital Economics and Artificial Intelligence Tutorial

Name: Anujin Nergui

Email: anergui@rand.edu

LinkedIn: https://www.linkedin.com/in/anujin-nergui-364213115/

I am a third-year Ph.D. student in Policy Analysis at the RAND School of Public Policy. My program uniquely integrates rigorous analytical training with practical policy application through RAND Corporation's On-the-Job Training model, where I work as an assistant policy researcher on real-world projects.

Prior to RAND, I earned my M.S. in Economics from Southern Illinois University as a Fulbright Scholar, focusing on quantitative methods and development economics. My undergraduate degree in Economics from Gazi University in Turkey was completed as a Turkish Government Scholar. Between academic programs, I spent seven years at the Central Bank of Mongolia as an auditor.

Through my RAND research assistantships, I contribute to projects directly relevant to economics and artificial intelligence (AI). Recently I worked on projects that analyzed macroeconomic implications of AI on GDP, federal debt, and labor markets[1], and sectoral AI capabilities assessments across health, financial, climate, and transportation areas[2]. Additionally, I contributed to a feasibility study of California's CalAccount program, financial inclusion initiative[3]. I investigated how digital payment systems can reduce inequality globally.

My coursework has emphasized advanced econometric methods, macroeconomics, microeconomics, economic development, and technology policy analysis. Currently, I am undertaking an independent study on "Technology Diffusion and Economic Development" covering diffusion theory, technology transfer to developing countries, and AI adoption patterns, directly preparing me for my dissertation research which focuses on the intersection of technology diffusion and economic development, with particular focus on AI.

Dissertation Title: "Technology Diffusion in Developing Countries: From Historical Patterns to AI Adoption Strategies" (Working title)

My dissertation research focuses on understanding how AI diffuses in developing economies, with implications for global economic inequality and development strategies. Three interconnected questions drive my work:

[1] https://www.rand.org/pubs/perspectives/PEA3888-3.html
[2] https://www.rand.org/pubs/research_reports/RRA3888-1.html
[3] https://www.rand.org/pubs/research_reports/RRA3117-1.html

1. How do economic factors (adoption cost and local firms' profitability) shape AI diffusion patterns across countries at different development stages?
2. What distinguishes AI from historical technologies in terms of diffusion dynamics, particularly regarding geopolitical dimensions and network effects?
3. How can developing countries design policies to participate in rather than observe the AI revolution?

Attending the NBER Digital Economics and AI tutorial would significantly advance my research in three ways:

First, understanding how leading economists model AI's unique characteristics— increasing returns, network effects, and potential for automation—would strengthen my analysis of diffusion dynamics in resource-constrained environments.

Second, interaction with researchers studying AI in developed economies would provide crucial comparative perspectives. My work on developing countries complements research on advanced economies, potentially revealing how initial conditions affect AI's economic impact. The tutorial would facilitate collaborations examining global AI diffusion patterns and international spillovers.

Third, methodological insights from the tutorial would enhance my empirical approach. Learning about new techniques for measuring AI adoption, quantifying productivity effects, and identifying causal impacts would improve my dissertation's rigor and contribute to more robust policy recommendations.

Thank you for considering my application. I am committed to advancing understanding of how AI and digital technologies can promote inclusive economic development, and the NBER tutorial would provide invaluable support for this mission.

Committee Members:

Chair: Howard J. Shatz, Senior Economist, RAND; Professor of Policy Analysis, RAND School of Public Policy, Howard J. Shatz - Profile | RAND

Member: Jonathan W. Welburn, Senior Researcher, RAND, and Professor of Policy Analysis, RAND School of Public Policy Jonathan W. Welburn | RAND,

Member: To be determined.