Application for the NBER Digital Economics and AI Tutorial

Summiya Najam
PhD Student in Economics | Stanford University | summiya@stanford.edu

Academic Background and Research Interests

I am currently a PhD student in Economics at Stanford University. Although I have not yet completed two years of PhD coursework, I have an MSc in Economics from the University of Oxford, where I graduated with Distinction, and completed the first year of the PhD in Public Policy (Economics Track) at Harvard Kennedy School (2025–2026) before joining Stanford in Fall 2026. My graduate training has included coursework at Oxford, Harvard, MIT, and now Stanford, where I am undertaking the first-year Economics PhD sequence.

My research interests lie at the intersection of development economics, behavioral economics, and artificial intelligence, particularly how algorithms can help us better understand individual behavior and improve economic decision-making.

At MIT, I took *Algorithms and Behavioral Science* with Professor Sendhil Mullainathan, where I developed a research proposal framing personalized persuasion as a prediction-policy problem. The project explored how algorithms could learn heterogeneous responses to different message framings and use these predictions to personalize interventions aimed at increasing women's economic participation in Pakistan, while accounting for potential backlash. This work deepened my interest in how behavioral insights can inform algorithmic design and how algorithms, in turn, can help us understand heterogeneity in individual behavior.

I am also a co-PI on an AI-enabled talent recognition project in Pakistan with Professor Asim Ijaz Khwaja at Harvard. We are developing an LLM-based assessment tool that uses interactive conversations and tasks to identify students' underlying abilities, including analytical reasoning, leadership, and empathy, which conventional academic assessments may overlook. We conducted an initial pilot with school students in Pakistan this summer and are now analyzing the data and developing structured LLM-based grading rubrics to validate the assessments against teacher evaluations and established measures from the psychology literature. The broader objective is to understand whether AI can improve how we identify individual strengths and ultimately inform more personalized investments in human capital.

I would like to attend the NBER Digital Economics and AI Tutorial to learn more about current research on the economic implications of AI, particularly how it is changing prediction, decision-making, and economic opportunities. I am also interested in learning about the empirical approaches economists are using to study these questions and hope to learn from discussions with other participants.