

To- Faculty Search Committee.

October 1, 2023

Dear Committee Members,

I am writing to apply for the position of Assistant Professor of Artificial Intelligence (AI) and Public Policy at George Mason University. I am a doctoral student in the Agricultural and Applied Economics department at the University of Wisconsin-Madison, and I expect to complete my degree by May 2024. My research interests encompass technology, health, aging, welfare, human capital, social security, and social inequity in the US and India. Much of my research involves evaluating technological shocks and policies on individual health and human capital outcomes.

In my job market paper, I provide causal evidence of the impact of the staggered rollout of broadband technology on mental health among older adults in the United States. I use the advanced difference-in-differences (DID) method with individual-level panel data. My results show that broadband rollout significantly reduces depression symptoms by 5.3% among older adults, primarily due to increased social connectedness and decreased social isolation. Improved health literacy and technological efficiency (telehealth) also partly drive the results. The heterogeneous treatment effect highlights that rural dwellers and women are the biggest beneficiaries of broadband's positive impact on mental health.

I have three other working papers that study the effect of various technologies on health, human capital, and social security enrollment. One of my other papers is being **revised and resubmitted**, and another is being **reviewed** in the top field journals. I also have other pipeline projects related to various technologies and their effects on health, social security enrollment, and human capital.

As a first-generation college graduate and a person of color belonging to the lowest socioeconomic stratum in Indian society, I bring a commitment to diversity to your university. As a teacher and a mentor, I have contributed to the diversity in and outside of UW-Madison. I mentored undergrad students, including students with diverse backgrounds like first-generation. I have experience teaching undergraduate guest lectures at UW-Madison and Bentley University that involve health, development, technological, and gender inequality.

I developed administrative, entrepreneurial, and interpersonal skills during my Ph.D. I was involved in academic services like referring for journals and serving faculty and student hiring committees that helped me develop training for administrative services. I am also entrepreneurial in finding funding for my doctoral studies and other research. Finally, I collaborated with scholars from interdisciplinary backgrounds, including economics, sociology, public policy, and public health, which helped me develop effective communication skills. I am excited to continue doing this at your university.

Thank you for your time and consideration. I look forward to hearing from you soon.

Sincerely,



Vikas PD Gawai