Application for Digital Economics and AI Tutorial 2025

Zhichen Chen
PhD Candidate
Questrom School of Business, Boston University
Email: zhichenc@bu.edu

Course of Graduate Study and Years of Enrollment

I am currently a third-year PhD candidate in the Questrom School of Business at Boston University, enrolled in 2022. My coursework has provided a strong foundation in experimental and econometrics methods. Key courses include:

- Advanced Microeconomics, Macroeconomics, and Econometrics I/II
- Field Experiment
- Advanced Topics in Microeconomic Theory
- Causal Inference
- Analytical Modeling
- Empirical Industrial Organization
- Machine Learning
- Natural Language Processing
- Generative AI (seminar)
- UChicago Experimental Summer School (online)

Research Interests and Ongoing Projects

My research lies at the intersection of econometrics, experimental methods (lab and field), and machine learning. I explore how digital platforms and AI technologies influence societal outcomes, with a particular focus on healthcare and user-generated content.

1. **Published Research:**
    - A milestone in my research journey is the publication of *Generative AI Degrades Online Communities* in *Communications of the ACM* (with Gordon Burtch and Dokyun Lee). This paper examines the impact of generative AI on content creation and user engagement. Building on this, my second co-authored study, *The Consequences of Generative AI for User-Generated Content and Online Community Engagement*, was recently published in *Nature: Scientific Reports*. This study highlights how large language models (LLMs) like ChatGPT have influenced platforms like Stack Overflow and Reddit, with varying outcomes depending on the platform's social structure.

2. **Current Research Projects:**
    - I am expanding my research on AI's role in healthcare through two major projects:

      a. **User-Generated Content (UGC) and LLMs in Healthcare:** This project investigates the influence of AI-generated health-related information on user behavior, particularly given widespread knowledge gaps regarding health conditions and treatments.
    - b. **Technological Interventions to Combat Social Stigma in Mental Health Support:** In collaboration with Gordon Burtch, Bin Gu, and Chrysanthos Dellarocas, I am examining the role of AI in reducing stigma and promoting mental health services. Through a combination of lab and field experiments, this research explores AI's potential to address mental health challenges.

3. **Abstract of Working Paper (Technological Interventions to Combat Social Stigma in Mental Health Support):**
   Many individuals face mental health challenges but do not seek professional help due to cost, accessibility, and stigma. This study explores how telehealth and conversational AI can reduce stigma and encourage engagement with mental health services. In an online experiment with over 1,000 participants, we examined how stigma perceptions and privacy assurances affected intentions to engage with telehealth and AI-based services. We found that high stigma concerns increased interest in telehealth and conversational AI. However, weak privacy assurances decreased engagement with AI-based services among individuals with low stigma concerns. A randomized controlled trial at a university in China further validated these findings.

4. **Dissertation Focus:**
   My dissertation leverages digital technologies to address longstanding challenges in healthcare. Specifically, I study:
   - Combatting social stigma in mental health
   - Addressing privacy concerns in health-related AI applications
   - Mitigating digital addiction and designing algorithmic solutions
   - Exploring moral hazard and the organizational use of AI in healthcare

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Committee Members

- **Gordon Burtch (Chair)**
- **Bin Gu**