Application for the NBER Digital Economics and AI Tutorial

February 11–12, 2026 | Stanford University

Name: Bakican Ayna

Email: bayna@umd.edu

Phone: +1-240-501-2081

Institution: University of Maryland (UMD), College Park

Program: Ph.D. in Economics (Third Year)

Address: Department of Economics, 4128 Tydings Hall, College Park, MD 20742

Graduate Study

I am a third-year Ph.D. student in Economics at UMD, where I have completed all core coursework and field requirements. My fields of specialization are Behavioral Economics and Experimental Economics, with a focus on lab and online experiments studying human-AI interaction, and information theory. At UMD, I work as a TA while working on my research projects.

Research Interests

My research focuses on human-AI interaction in economic settings, where I study how individuals adjust their beliefs, incentives and behavior when AI comes into the framework as a deus-ex-machine whether in the form of AI agents or AI-generated information making the NBER Digital Economics and AI Tutorial exceptionally well-aligned with my research trajectory. I also work on information theory with a focus on experimental settings.

Current Research Projects

Project 1: AI Participation and Asset Markets (Work in Process)

joint with Erkut Ozbay

We examine how the presence of AI tools affect the way traders engage in transactions in financial markets, particularly, in experimental asset markets. We follow upon the existing literature, particularly, Smith, Suchanek, and Williams (1988) which show that even when the fundamental values are known, the speculative bubbles are inevitable in the asset markets. Our study examines whether including an access to generative AI tool where participants can communicate change these dynamics or influences their behavior regarding the price formation.

The first data collection is scheduled for the beginning of December, 2025 at the Experimental Economics Laboratory, UMD.

Project 2: Lying Under Uncertainty (Work in Process)

joint with Marty Haoyuan Chen, and Jingyi Xing

We examine how imperfect information regarding the true state of the world affects lying behavior through a chip draw and reporting phases. Under perfect information, participants draw a chip and know the exact number and color of it. However, under imperfect information, they only see its color, giving them a set of feasible numbers. The comparison across treatments reveals whether uncertainty regarding the true state encourages misreporting or whether honesty norms remain consistent with the literature findings. We ran the experiment on Prolific, and a draft is expected to be available in early January, 2026.

Future Work

My next project will be focused on human-AI collaboration in coordination and bargaining environments. I will study how humans interpret and weigh AI recommendations, and under what conditions AI advice improves or distorts strategic reasoning.

Dissertation Plans and Committee (Anticipated)

I am in the early stages of formulating a dissertation proposal that builds on the projects described above. I anticipate that my dissertation will be focusing on human-AI interaction within an economics setting. My committee is expected to include:

- **Prof. Erkut Y. Ozbay** (ozbay@umd.edu)
- **Prof. Emel Filiz-Ozbay** (efozbay@umd.edu)
- **Prof. Yusufcan Masatlioglu** (yusufcan@umd.edu)

Importance of the NBER Digital Economics and AI Tutorial

The tutorial is closely aligned with my research agenda. My dissertation will likely to focus on how AI alters behavior in markets and strategic settings which is a core focus of digital economics. Participation would provide exposure to cutting-edge research on AI agents, experimental methodology, and digital platforms, along with feedback from leading scholars working at this intersection.

The opportunity to engage with researchers developing frontier techniques for studying human-AI interaction would directly benefit the conceptual and empirical components of my current work.

Commitment to Participation

If invited, I will fully prioritize participation in the tutorial on February 11–12, 2026. I understand that the meeting will run from 1 p.m. on February 11 through noon on February 12 and that participants may also attend the NBER Digital Economics and AI Meetings on February 12–13. I will cover my own travel expenses and respectfully request consideration for hotel support.

I appreciate the opportunity to apply and look forward to engaging with the NBER community.

Sincerely,

Bakican Ayna
Ph.D. Candidate in Economics, University of Maryland
bayna@umd.edu