Application for Digital Economics and AI Tutorial

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Course of Graduate Study

I am a third-year Ph.D. student in Economics at Stanford University (AY 2025–2026). My main fields are Industrial Organization and Public Economics, and I am especially interested in the digital economy, online platforms, and competition.

During my first two years, I completed the core graduate coursework in microeconomics, macroeconomics, and econometrics, along with field courses in IO and public economics. In IO, I learned about topics such as market power, platform competition, mergers, and regulation of online intermediaries. In public economics, I studied how firms and consumers respond to taxes and policies in different market settings. This training has helped me build a foundation for research on issues related to technology, information markets, and regulation. It also motivated my interest in questions around AI, market design, and competition in digital environments.

Research Interests and Current Projects

Since my second year, my research has focused on how people find information online and how AI tools are changing that process. In particular, I study the rise of large language models (LLMs) as new gateways to digital content. These tools can provide direct answers, which may reduce the need for users to click through to websites.

I am interested in how this shift affects three main areas:

1. User behavior: how people search for and consume information when both search engines and AI assistants are available.
2. Content creators: whether websites still have enough incentive to produce high-quality information if fewer users visit them.
3. Market structure: how competition among online platforms might change when AI models mediate more of the traffic.

Overall, my work aims to understand what these changes mean for the long-term health of the information ecosystem and what kinds of policies or platform designs can support access to reliable, diverse online content.

Current Research Projects

Project 1: Beyond Search – How LLMs Reshape Users' Information Seeking (joint work with Cristiana Firullo, Cristobal Cheyre, Alessandro Acquisti

This empirical project examines how users allocate their attention between search engines and LLM-based assistants in observational browsing data. We draw on two complementary datasets: (i) a field study in which participants install a browser extension that captures real browsing and search behavior—including their interactions with LLM tools—and (ii) Comscore, a large-scale nationally representative U.S. web-usage panel. We classify sessions based on the type of platform used (search-only, LLM-only, mixed) and study how features of the query—such as its complexity and topic—shape users' choice of intermediary.

We then evaluate how the use of LLMs influences the distribution of follow-up activity across the web. Specifically, we test whether turning to an LLM leads users to visit fewer websites, concentrate activity on dominant platforms, or reduce the visibility of smaller informational sites. This observational analysis contributes to policy discussions about whether LLMs complement or displace traditional search, and what this shift implies for competition and discoverability across the open web.

Project 2: Incentives for Content Producers in the Age of AI

While Project 1 focuses on user behavior and online market outcomes, this second project develops a simple framework to study the incentives of content producers whose information is used by LLMs. I model an AI platform that provides users with answers directly, which can reduce the traffic that would otherwise go to the original websites. Content producers invest in creating high-quality information, but they may invest less if the platform benefits from their work without giving anything back.

I explore different ways AI platforms could support content creation, such as paying for training data, guaranteeing some level of referral traffic, or offering contracts that reward high-quality content. The framework uses ideas from IO and two-sided markets and focuses on how compensation today affects future investment in quality. The goal is to understand the conditions under which AI platforms can sustain high-quality content in the long run and to offer guidance for platform design and emerging policies around data compensation.

Together, these projects aim to provide a practical foundation for understanding the evolving role of AI in online information markets and how to preserve the incentives needed to maintain a healthy and diverse web.