Application for the Digital Economics and AI Tutorial

Contact Details

Full Name	Email Address	Phone Number
Zi Yang Chen	ziyang_chen@berkeley.edu	650-283-6192

Graduate Study Details

PhD at UC Berkeley Haas School of Business

Program: Quantitative Marketing

Current Year in Program: 4th Year

Relevant course of study:

Course Code	Title	Description
ECON 204	Mathematical Tools for Economics	Math for econ PhD requirement
ECON 201A/B	Economic Theory	Econ PhD required sequence
ECON 220A/B	Industrial Organization	Econ PhD IO sequence requirement
ECON 240A/B	Econometrics	Econ PhD required sequence
MATH 272	Interdisciplinary Topics in Mathematics	Market design
ECON 244	Applied Econometrics	Econ PhD metric sequence
PHDBA 269A	Seminar in Marketing: Buyer Behavior	Quant Marketing sequence
PHDBA 269C	Seminar in Marketing: Marketing Strategy	Quant Marketing sequence
PHDBA 269D	Special Research Topics in Marketing	Game theory; Algorithms and Games + Information Design; Heterogeneity
ECON 241A	Econometrics	Econ PhD metric sequence
PHDBA 269B	Seminar in Marketing: Choice Modeling	Empirical methods in Marketing and Industrial Organization
STAT 238	Bayesian Statistics	https://stat238.berkeley.edu/spring-2025/
COMPSCI 294	Special Topics	Agentic AI

Master's at Stanford

Program: Management Science and Engineering, Computational Social Science track

Status: graduated in 2022

Relevant course of study:

Course Code	Title	Description
CS 229	Machine Learning	Graduate-level intro to ML
MS&E 213	Introduction to Optimization Theory	Program requirement
MS&E 327	Topics in Causal Inference	
CS 224W	Machine Learning with Graphs	Network ML
ECON 271	Intermediate Econometrics II	Econ PhD metrics sequence
MS&E 311	Optimization	OR PhD sequence
ECON 293	Machine Learning and Causal Inference	Apply ML to causal inference
MS&E 321	Stochastic Systems	OR stochastic process course
ECON 202	Microeconomics I	Econ PhD micro sequence
MS&E 234	Data Privacy and Ethics	
MS&E 284	Data Science of Organizations	
STATS 361	Causal Inference	Stats PhD level causal inference

Research Interests

On the supply side, I study how firms design product lines and signal quality on online platforms, where consumers often cannot judge quality before they buy. On the demand side, I study how new technologies change the way consumers search for and choose products. I also have ongoing work on the broader economic and social effects of these technologies on firms and communities.

Research Projects

Reviving Durable Digital Goods

with Olivia R. Natan and Mingduo Zhao

We study how downloadable content (DLC) affects a video game's core performance and producers' incentives to maintain quality. Using daily data on more than 50,000 titles on Steam, which covers roughly three-quarters of the U.S. PC market, we compare games that release their first DLC with matched control games. Two-way fixed effects models with imputation estimators show that base game sales roughly double on average after a DLC launch, with large early spikes. DLC releases also coincide with higher daily reviews and concurrent players, and with a roughly 12 percentage point increase in patch announcements. These results suggest that DLC enables price discrimination across heterogeneous consumers while also renewing attention to the base game and signaling a commitment to ongoing maintenance.