NBER Digital Economics and AI Tutorial Application

Contact information

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Education

University College London 2023–2029 (expected)
PhD in Financial Economics

UCL coursework: Microeconomics, Macroeconomics, Econometrics, Real Analysis and Probability with Economic Applications, Economic Theory: Bounded Rationality and Learning, Financial Economics, Asset Pricing, Corporate Finance Theory, Financial Intermediation Theory, and Financial Econometrics.

Before UCL, I took graduate-level courses in Industrial Organization, Health Economics, and Banking, among others.

Research interests and projects

Fields: Economics of AI, information economics, financial economics, game theory.

AI can make useful information cheaper and more accessible, yet this need not improve collective learning. People may acquire less independent information, while greater reliance on AI can make their information sources more correlated. I study how these changes shape sequential decision-making in social learning and information aggregation in financial markets. My broader theoretical interests include repeated games with limited commitment and political bargaining. Below, I outline selected projects that examine AI's effects on information aggregation.

Social Learning with Shared Private Signals *Working paper*

Abstract. The growing use of AI as a source of information extends a longstanding pattern: different people may privately observe the same signal. We study how such shared private signals shape learning from others' choices. Repeated reliance on one signal can encourage herding, while the possibility of a shared source can make agents less willing to follow earlier choices against their independent information. When the shared signal is less accurate than independent signals, a sufficiently small share of users can improve learning under certain conditions, but a majority raises the probability of an incorrect herd relative to an economy with only independent agents. When the shared signal is more accurate, further accuracy gains can make its mistakes harder to correct and increase the probability of an incorrect herd. If sufficiently accurate, it determines the direction of herding. Neither making the shared signal public nor identifying the source behind each choice uniformly improves learning.

Shared Private Information and Information Aggregation *Working paper*

Abstract. This paper studies information aggregation in a financial market where traders can acquire a shared AI signal, purchase independent expert information, or remain uninformed. Traders then trade and learn from prices. Cheaper AI information can expand access to information, but reliance on a common signal generates correlated demand and amplifies shared errors. The effect on price informativeness depends on the information-acquisition regime and the relative precision of shared and independent information. When some traders remain uninformed, lowering the cost of shared information changes information choices without changing price informativeness. Once all traders acquire information, lower shared-information costs can instead reduce price informativeness if the shared signal is less precise than independent research. The analysis connects the benefits of cheaper information to the equilibrium incentives to acquire independent expertise, showing why broader access to information need not make prices more informative.