

Yijun Liu

Contact Information	Department of Economics University of Notre Dame	yliu2346@nd.edu
Academic Appointment	Assistant Professor, Department of Economics, University of Notre Dame	2025–present
Education	Ph.D., Economics, Northwestern University Advisors: Jeffrey Ely, Alessandro Pavan	2019–2025
	M.A., Economics, Northwestern University	2019–2020
	M.A., Social Science (Economics), The University of Chicago	2016–2018
	B.A., Economics and Finance, Nanjing University	2011–2015
Working papers	“Dynamic Reward Design” <i>Abstract:</i> This paper studies a dynamic screening model where a principal hires an agent with limited liability. The agent’s private cost of working is an i.i.d. draw from a continuous distribution. His working status is publicly observable. The limited liability constraint requires that payments remain nonnegative at all times. In this setting, despite costs being i.i.d. and the payoffs being additively separable across periods, the optimal mechanism does not treat each period independently. Instead, it features backloading payments and requires the agent to work in consecutive periods. Specifically, I characterize conditions under which the optimal mechanism either grants the agent flexibility to start working in any period or restricts the starting period to the first. In either case, once the agent begins working, he must work consecutively until the end. “Resource Allocation with Midterm Review” <i>Abstract:</i> A principal allocates resources to an agent with a project of privately known quality. The principal aims at allocating resources to match the project’s quality, while the agent always prefers a higher allocation. In the presence of a midterm review, this paper characterizes the principal’s optimal resource allocation strategy over two periods (before and after the review). Given the time lag between the midterm review and the initial decision-making, the principal should leverage the midterm review information to inform the first-period allocation. Specifically, the optimal first-period allocation aligns with the project’s reported quality, with higher-quality projects receiving more resources. In the second period, the principal adjusts the allocation to reward or penalize the agent based on the midterm review—being more lenient toward lower types and stricter with higher types. This strategy incentivizes the agent to report truthfully in the first period and maximizes the principal’s expected payoff. The benefits of this leveraging-information strategy are robust across a wide class of loss functions. “A Theory of GPA Inflation” <i>Abstract:</i> Based on Bergemann et al. (2015), this paper studies optimal market segmentation under the constraint that only monotone partitions of the type space are allowed. Specifically, consider a setting in which a university observes students’ private types and designs a grading rule to disclose information to employers. For fairness, the grading rule must be a monotone partition, meaning higher types receive higher grades. When the university’s objective is a weighted sum of students’ and employer’s surplus, this paper finds that the optimal grading rule either fully reveals all type information or features coarser partitions for higher types and finer partitions for lower types. The latter structure is optimal when the university places more weight on students’ surplus, providing a theoretical explanation for the GPA inflation observed in practice.	

Seminars and Conferences

University of Western Ontario, University of California, Riverside, University of Notre Dame, The University of Hong Kong, Shanghai University of Finance and Economics, Kansas Workshop in Economic Theory, Stanford Institute for Theoretical Economics (SITE) 2025
Northwestern University Center of Economic Theory Student Lunch, 35th Stony Brook International Conference on Game Theory, Northwestern University Center of Economic Theory Student Lunch 2024
Northwestern University Theory Lunch 2023
Northwestern University Center of Economic Theory Student Lunch 2022
University of Chicago MA Thesis Workshop 2017

Fellowships & Awards

Dissertation University Fellowship, Northwestern University 2024–2025
Distinguished TA Award, Northwestern University 2022
Graduate Fellowship, Northwestern University 2019–2025
Social Science Scholarship, University of Chicago 2017
Distinguished Student Scholarship, Nanjing University 2012–2015

Refereeing

American Economic Review

Languages

English (fluent), Chinese (native)