HSU, Ke-Cheng (Clio)

(852) 6840 9753 | khsu@connect.ust.hk | github.com/cliohsu1997 | cliohsu1997.github.io

Summary

PhD candidate in Economics at HKUST, graduating June 2027. Graduated first in class (CGA 3.9/4.3; Academic Achievement Medal, top 1%). Uses data to answer business questions and explains results clearly. Leadership and communication experience as Hall Tutor and Teaching Assistant Coordinator, with student teaching ratings of 4.5–4.7 out of 5. Hong Kong permanent resident; native Mandarin, fluent English, communicative Cantonese. Applying for the 2027 Management Trainee Programme, with Customer and Product Development as the preferred function.

Education

The Hong Kong University of Science and Technology, Hong Kong

Doctor of Philosophy in Economics — Expected Graduation: June 2027

Master of Philosophy in Economics — 2020–2022 CGA: 4.1/4.3

BSc in Mathematics and Economics, Minor in Actuarial Mathematics — 2015–2019 CGA: 3.9/4.3

Graduated first in class. Awards: Dean's List (2016–2019); University Scholarship (730K HKD); Academic Achievement Medal (top 1%); Postgraduate studentship (1.5M HKD); Redbird scholarship (40K HKD).

Experience

Teaching Assistant Coordinator, Department of Economics, HKUST — 2025–2026

- Evaluated teaching assistants' practice teaching, gave feedback on what to change, and helped them improve.

Hall Tutor, UG Hall I, HKUST — 2024–present

- Helped residents work through conflicts and supported student life in a residential community.

Lecturer & Teaching Assistant, Department of Economics, HKUST — 2020–present

- Lecturer for MSc Math Camp (student rating 4.53/5); TA for PhD and undergraduate economics (average 4.72/5 across five courses).

Projects

Return Policy Design in E-Commerce *(Job Market Paper)*

- Built and estimated a structural model of purchase, return-shipping-insurance take-up, and return decisions under monopoly pricing, using within-retailer switches between automatic provision and selective adoption of return-shipping insurance on Taobao (2017–2023; ∼62M RMB revenue; six apparel categories; ∼20–30% return rates); scraped and OCR-digitized product attributes in Python.
- Developed a reproducible, version-controlled estimation pipeline on AWS and HPC/SLURM (Python, R, C++); recovered category-specific demand, consumer fit uncertainty, and return responses via GMM; accelerated Monte Carlo and optimization in C++; validated policy rankings (seller profit, consumer surplus, social welfare) with bootstrap inference.
- Found that a lenient policy (seller pays return shipping) suits high-margin categories, a strict policy (buyer pays) suits thin-margin ones (improving welfare by ∼50 pp in the thinnest), and a proposed menu (lower price with partial restocking fee vs. full price with full refund) beats both, reaching ∼75% of the best attainable outcome in most categories; back-of-envelope calculation suggests ∼5M RMB profit improvement. The same method answers what a product team asks before a launch: how much a new product would sell, what it would contribute to profit, and whether it would cannibalize existing products.

Inventory and Pricing under Resale Price Maintenance (RPM) *(with K. Kawaguchi, HKUST; K. Kawai, U. Tokyo)*

- Built a dynamic oligopoly model of pricing and inventory under demand uncertainty and RPM, with equilibrium stockouts and unsold returns (35–40% of Japanese books printed are discarded); constructed title-by-market-by-month panels from monthly bookstore POS data (tens of billions of records across 1,000+ stores), linked via standardized ISBNs and merged with local demographics and detailed title-level information scraped from Amazon in Python.
- Estimated demand and supply with instrumental variables (2SLS) and Hausman-style price instruments; validated the estimator with Monte Carlo on simulated equilibria; selected controls with LASSO and panel fixed effects; implemented iterative equilibrium simulation in C++.
- Found that the static model overestimates marginal cost by ∼20% when ignoring dynamic demand uncertainty and inventory; uncovered stockout-driven intertitle and intertemporal substitution (not interregional) relevant for inventory and assortment decisions.

Skills

Languages: Mandarin (Native), English (Fluent), Cantonese (Communicative).
Technical: Python, R, C++, Stata, LaTeX, AWS, HPC/SLURM; structural estimation and counterfactual simulation.
References: Kei Kawai (UTokyo; Compass Lexecon), Kohei Kawaguchi (HKUST; UTokyo Econ Consulting), Pak Hung Au (HKUST).