HSU, Ke-Cheng (Clio)

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Professional Summary

Native Taiwanese speaker who grew up in Taiwan and came to Hong Kong for university studies; Hong Kong permanent resident. Ph.D. candidate in Economics at HKUST. Analyzes how companies compete, set prices, and manage risk on large datasets; builds tested models in Python, R, and C++; and turns results into clear written updates and figures under deadlines. Earlier research modeled bank crises on interbank networks; Ph.D.-level coursework covers merger simulation, entry/exit counterfactuals, and firm-conduct identification. Professionally fluent in English. Seeking Analyst, Taiwan Institutional Sales (Fixed Income Division) at Morgan Stanley, Hong Kong.

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, CGA: 4.1/4.3 — 2020–2022

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

Awards: Full University Scholarship (730K HKD); Academic Achievement Medal (top 1%); Postgraduate studentship (1.5M HKD); Redbird scholarship (40K HKD).

Experience

Research Assistant, National Taiwan University — 2020

- Built a MATLAB model of a bank crisis on an interbank lending network, as a negotiation between the regulator and the banks' creditors, who share losses only if the regulator's no-bailout threat is credible.
- Found that less tightly linked networks make that threat more credible in a large shock.

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

- Lecturer for MSc Math Camp (rated 4.53/5); TA for PhD and undergraduate economics (avg 4.72/5); clear Mandarin and English explanation under deadlines.

Projects

Pricing and Inventory in Japanese Book Retail *(w/ K. Kawaguchi, HKUST & UTokyo Econ Consulting; K. Kawai, U. Tokyo & Compass Lexecon)*

- Modeled how competing bookstores set prices and hold stock when demand is uncertain and the retail price is fixed in advance; unsold copies are returned and 35–40% of print runs are discarded.
- Cleaned point-of-sale records from 1,000+ stores (hundreds of billions of observations) into a dataset by title, city, and month, adding population figures and book details scraped from Amazon in Python.
- Estimated demand and supply costs by non-linear optimization; wrote tests and simulated datasets to confirm the pipeline recovers the right numbers, with heavy computation in C++.
- Ignoring inventory and uncertain demand overstates cost by about 20% and would misstate margins. Delivered as figures, tables, and a weekly report on a fixed deadline.

Pricing and Returns in Apparel E-Commerce *(Taobao, 2017–2023)*

- Built a structural model of purchase, insurance, and return decisions under seller pricing, for a Taobao apparel retailer that repeatedly switched between automatic return-shipping insurance and optional, buyer-purchased insurance (2017–2023; about 62 million RMB; six categories; 20–30% of orders returned).
- Automated data extraction with a Python scraper, an API, and AI-based OCR, converting product images into analyzable text.
- Estimated the model by the generalized method of moments in a tested pipeline (Python, R, and C++ on AWS and a computing cluster), recovering category-specific purchase values, demand uncertainty, and return responses.
- A stricter return policy curbs wasteful returns but excludes worthwhile purchases: automatic insurance wins at high margins; optional insurance wins at thin margins, by 15–30 percentage points of first-best welfare.
- Presented at the Asia-Pacific Industrial Organization Conference 2026, the Econometric Society Australasia Meeting 2026, and the China Economics Annual Conference Summer Forum 2026.

Skills

Languages: Native Taiwanese speaker; Mandarin (Native); English (Fluent); Cantonese (Basic).
Technical: Python, R, MATLAB, Stata, C++, Excel, LaTeX, AWS; web scraping, OCR; regression, maximum likelihood, generalized method of moments, non-linear optimization.
AI: Experimental and responsible use of AI tools (LLM-assisted coding, OCR); outputs verified by tests.
Right to work: Hong Kong permanent resident.
References: Kei Kawai (UTokyo), Kohei Kawaguchi (HKUST), Pak Hung Au (HKUST).