Ke-Cheng Hsu (Clio)
Ph.D. Candidate, Department of Economics, HKUST
(852) 6840 9753 | khsu@connect.ust.hk
cliohsu1997.github.io | github.com/cliohsu1997

16 November 2026

Hiring Team
UBS — Research, Economics & Strategy, China Equity Strategy, Shanghai
Re: Research – Economics & Strategy – China Equity Strategy Associate (345218BR)

Dear Hiring Team,

I am writing to apply for the Research – Economics & Strategy – China Equity Strategy Associate position in Shanghai (345218BR). I am a Ph.D. candidate in Economics at HKUST (expected June 2027; I can finish as early as February 2027), a Hong Kong permanent resident, a native Mandarin speaker, and professionally fluent in English. I am drawn to the role because it combines careful analysis of China A-share markets—market developments, earnings, economic data, and investor flows—with clear writing for clients and colleagues. My training is in building frameworks that connect evidence to theory, estimating them on large data, and presenting the results so non-specialists can follow them.

In my job market paper on Taobao apparel return policy, I clean and link a large Chinese e-commerce transaction panel (2017–2023; ∼62M RMB revenue; six categories), estimate a structural model of purchase, return-shipping insurance, and returns, and compare policies by seller profit, consumer surplus, and social welfare. A counterfactual menu that pairs a discounted price with a moderate restocking fee raises social welfare by about 2 million RMB (roughly a 5% gain) and seller profit by about 1.2 million RMB relative to the status-quo insurance policies. The work is close to what the posting describes day to day: maintain models and databases, run quantitative analysis, and turn findings into written notes under a clear research question.

With Professors Kohei Kawaguchi and Kei Kawai, I build title-by-market-by-month panels from bookstore point-of-sale records and estimate pricing and inventory under demand uncertainty. Relative to a classical static model, allowing for demand uncertainty and inventory lowers estimated marginal cost by about 20%. We summarize results in figures, tables, and a weekly report on a fixed deadline. I have also presented related work at the Asia-Pacific Industrial Organization Conference, the Econometric Society Australasia Meeting, and the China Economics Annual Conference in 2026.

I run analysis pipelines in Python, R, and C++ on AWS and HPC/SLURM, and I use Excel, Word, and PowerPoint for models, figures, and presentations. I use AI tools regularly for research and coding, and I check outputs carefully before relying on them. Earlier work on an interbank lending network in MATLAB gave me some exposure to financial-market dynamics. As a lecturer and teaching assistant at HKUST (ratings 4.53/5 and 4.72/5), and as Teaching Assistant Coordinator in the Business School, I have practice explaining technical material clearly in Mandarin and English and keeping written work consistent before it goes out. I would welcome the chance to contribute to China equity strategy research in Shanghai.

I have attached my resume and transcript, and I can send my job market paper on request. Thank you for your consideration.

Sincerely,

Ke-Cheng Hsu (Clio)

HSU, Ke-Cheng (Clio)

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Professional Summary

PhD candidate in Economics at HKUST specializing in empirical industrial organization, market structure, and digital economics. Builds and estimates structural models of pricing, demand, and inventory on large Chinese e-commerce and retail datasets, turning raw records into revenue, cost, margin, and welfare measures under counterfactual scenarios—the same quantification skill set used in equity strategy research and valuation. Clear written and verbal communicator in Mandarin and English; works in Python, R, and C++ on AWS and HPC/SLURM; uses AI tools daily for research, coding, and OCR extraction, with outputs verified by tests. Hong Kong permanent resident. Seeking the Research – Economics & Strategy – China Equity Strategy Associate role at UBS in Shanghai.

Education

The Hong Kong University of Science and Technology, Hong Kong

Doctor of Philosophy in Economics Expected Graduation: June 2027 (available as early as February 2027)

Research interests: Empirical industrial organization and digital economics.

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: Dean's List (2016–2019); 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); present technical material clearly to non-specialist audiences in Mandarin and English.

Teaching Assistant Coordinator, Business School, HKUST 2025–2026

- Coached and evaluated a teaching team on teaching materials and mock lectures—quality control before notes go out.

Hall Tutor, UG Hall I, HKUST 2024–present

- Mediated resident conflicts and led orientation, workshops, and career talks.

Projects

Inventory and Pricing under Resale Price Maintenance (RPM) *(w/ K. Kawaguchi, HKUST & UTokyo Econ Consulting; K. Kawai, U. Tokyo & Compass Lexecon)*

- 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 (deliveries, sales, returns; 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++.
- Showed that the classical static model overstates marginal cost by ∼20% once demand uncertainty and inventory decisions are ignored, a correction that changes a company's assessed value; delivered weekly figures, tables, and reports on a fixed deadline.

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

- Sole-authored Ph.D. structural industrial-organization study: built and estimated a model of purchase, return-shipping-insurance take-up, and return 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 an original welfare framework that decomposes losses into ex-ante purchase inefficiency and ex-post return inefficiency; recovered category-specific demand, fit uncertainty, and return responses via GMM with bootstrap inference; built a reproducible estimation pipeline on AWS and HPC/SLURM (Python, R, C++) with Monte Carlo validation of policy rankings for seller profit, consumer surplus, and social welfare.
- Showed that a menu pairing a discounted price with a moderate (∼10–15%) restocking fee raises social welfare by about 2 million RMB (∼5%) and seller profit by about 1.2 million RMB relative to status-quo insurance policies, attaining ∼75–78% of first-best welfare outside dresses; selective adoption outperforms automatic provision by ∼15–30 pp of first-best welfare in thinner-margin categories.

Skills

Languages: Mandarin (Native), English (Fluent), Cantonese (Basic).

Technical: Python, R, MATLAB, Stata, C++, Microsoft Excel, Word, PowerPoint, LaTeX, AWS, HPC/SLURM; web scraping, AI-based OCR; 2SLS, MLE, GMM, LASSO, Monte Carlo, bootstrap.

AI: Daily use of AI tools for research, coding, OCR data extraction, and workflow automation; outputs verified by tests.

References: Kei Kawai (UTokyo; Compass Lexecon), Kohei Kawaguchi (HKUST; UTokyo Econ Consulting), Pak Hung Au (HKUST).

Name: **HSU, Ke-cheng** 許可證
Student ID: **20312538**
Year of Study: **4th Year** **Reg Status:** **Active in Program**
Print Date: **24 August 2026 17:23:09**

Unofficial Transcript of Academic Record (as of 24 August 2026)

Advisor(s): AU, Pak Hung

Degree Awarded

Degree: Bachelor of Science in Mathematics and Economics
Classification: First Class Honors
Conferred Date: 18 June 2020

Minor: Actuarial Mathematics

Degree: Master of Philosophy in Economics
Conferred Date: 26 November 2022

Academic Program

Admit Date: 1 September 2015
Program: Bachelor Degree in School of Science (International Research Enrichment Track)

Program Change: 2016-17 Fall
Program: Bachelor of Science
Major: Mathematics and Economics

On Leave: 2 January 2018 to 2 September 2018

Effective: 2018-19 Fall
Add Minor: Actuarial Mathematics

Admit Date: 7 September 2020
Program: Master of Philosophy
Field of Study: Economics

Admit Date: 1 September 2022
Program: Doctor of Philosophy
Field of Study: Economics

Academic Records

2015-16 Fall (Full-Time)

Course Code	Course Title	Credit Attempted	Credit Earned	Grade
COMP1022P	Introduction to Computing with Java	3.0	3.0	B+
HLTH1010	Healthy Lifestyle	0.0	-	PP
LANG1002A	English for University Studies I	3.0	3.0	A-
MATH1023	Honors Calculus I	3.0	3.0	B+
PHYS1113	Laboratory for General Physics I	1.0	1.0	A-
PHYS1312	Honors General Physics I	3.0	3.0	B+
SCIE1000	Science School Induction	0.0	-	PP

TGA: 3.423
CGA: 3.423

Cumulative Credits Earned: 13.0

Awards: University Scholarship

Courses taken in this term are weighted 0.5 towards the classification of degree honors

2015-16 Winter (Full-Time)

Awards: University Scholarship

2015-16 Spring (Full-Time)

Course Code	Course Title	Credit Attempted	Credit Earned	Grade
CHEM1020	General Chemistry IB	2.0	2.0	A
HLTH1010	Healthy Lifestyle	0.0	-	P
LANG1003A	English for University Studies II	3.0	3.0	A-
LIFS1901	General Biology I	3.0	3.0	A+
MATH1024	Honors Calculus II	3.0	3.0	A-
PHYS1115	Laboratory for General Physics II	1.0	1.0	A
PHYS1314	Honors General Physics II	3.0	3.0	B+
SCIE1000	Science School Induction	0.0	-	P
SCIE1500	Guided Study on Research I	1.0	1.0	A+

TGA: 3.831
CGA: 3.648

Cumulative Credits Earned: 29.0

Awards: Dean's List

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Print Date: **24 August 2026**
17:23:09

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University Scholarship

Courses taken in this term are weighted 0.5 towards the classification of degree honors

2015-16 Summer (Full-Time)

Awards: University Scholarship

2016-17 Fall (Full-Time)

Course Code	Course Title	Credit Attempted	Credit Earned	Grade
ECON2103	Principles of Microeconomics	3.0	3.0	A
LANG2010	English for Science I	3.0	3.0	A-
MATH2023	Multivariable Calculus	4.0	4.0	A+
MATH2121	Linear Algebra	4.0	4.0	A+
MATH2411	Applied Statistics	4.0	4.0	A-

TGA: 4.017
CGA: 3.789

Cumulative Credits Earned: 47.0

Awards: Dean's List
University Scholarship

2016-17 Winter (Full-Time)

Awards: University Scholarship

2016-17 Spring (Full-Time)

Course Code	Course Title	Credit Attempted	Credit Earned	Grade
ECON3113	Microeconomic Theory I	4.0	4.0	A-
ECON3123	Macroeconomic Theory I	3.0	3.0	A
MATH2033	Mathematical Analysis	4.0	4.0	A-
MATH2421	Probability	4.0	4.0	A-

TGA: 3.760
CGA: 3.782

Cumulative Credits Earned: 62.0

Awards: Dean's List
University Scholarship

2016-17 Summer (Full-Time)

Course Code	Course Title	Credit Attempted	Credit Earned	Grade
HUMA1250	Themes in Literature: Love and Death	3.0	3.0	A-
MATH2511	Fundamentals of Actuarial Mathematics	3.0	3.0	A+
PHYS1006	Astronomy for Beginners	3.0	3.0	A+

TGA: 4.100
CGA: 3.823

Cumulative Credits Earned: 71.0

Awards: University Scholarship

2017-18 Fall (Full-Time)

Course Code	Course Title	Credit Attempted	Credit Earned	Grade
COMP2011	Introduction to Object-oriented Programming	4.0	-	W
ECON3133	Microeconomic Theory II	4.0	4.0	A+
ECON3143	Macroeconomic Theory II	4.0	-	W
ECON3334	Introduction to Econometrics	4.0	4.0	A
HUMA1000A	Cultures and Values: Language, Communication and Society	3.0	3.0	A-
MATH3033	Real Analysis	4.0	4.0	A
MATH4427	Loss Models and Credibility Theory	3.0	3.0	A+

TGA: 4.067
CGA: 3.872

Cumulative Credits Earned: 89.0

Awards: Dean's List
University Scholarship

2018-19 Fall (Full-Time)

Name: HSU, Ke-cheng 許可證
Student ID: 20312538
Year of Study: 4th Year
Print Date: 24 August 2026 17:23:09
Reg Status: Active in Program

Unofficial Transcript of Academic Record (as of 24 August 2026)

Course Code	Course Title	Credit Attempted	Credit Earned	Grade
ECON3143	Macroeconomic Theory II	4.0	4.0	B+
ECON4284	Econometrics for Cross-Section and Panel Data	4.0	4.0	A
ECON4670	Economics Research and Communication	0.0	-	P
LANG3010	English for Mathematics and Economics	3.0	3.0	A-
PHYS1003	Energy and Related Environmental Issues	3.0	3.0	A+
UROP1100V	Undergraduate Research Opportunities Series 1	1.0	1.0	P

TGA: 3.800

Transfer Credit(s) from Putonghua Oral Proficiency Assessment and equivalent course(s) of HKUST:

LANGCCOM	Chinese Language Proficiency Achieved	3.0	3.0	T

CGA: 3.862

Cumulative Credits Earned: 104.0
Cumulative Transfer Credits: 3.0

Awards: Dean's List
University Scholarship

2018-19 Winter (Full-Time)

Awards: University Scholarship

2018-19 Spring (Full-Time)

Course Code	Course Title	Credit Attempted	Credit Earned	Grade
COMP1942	Exploring and Visualizing Data	3.0	3.0	A-
ECON4304	Time Series Econometrics and Business Forecasting	4.0	4.0	A
MATH3425	Stochastic Modeling	3.0	-	W
MATH4512	Fundamentals of Mathematical Finance	3.0	3.0	A+
MATH4514	Financial Economics in Actuarial Science	3.0	3.0	A+
MATH4999	Independent Capstone Project	3.0	3.0	A+

TGA: 4.113
CGA: 3.896

Cumulative Credits Earned: 120.0
Cumulative Transfer Credits: 3.0

Awards: Dean's List
University Scholarship

2018-19 Summer (Full-Time)

Course Code	Course Title	Credit Attempted	Credit Earned	Grade
COMP1029V	Excel VBA Programming Bridging Course	1.0	1.0	P
SOSC1960	Discovering Mind and Behavior	3.0	3.0	A-

TGA: 3.700
CGA: 3.891

Cumulative Credits Earned: 124.0
Cumulative Transfer Credits: 3.0

Awards: University Scholarship

2019-20 Fall (Full-Time)

Course Code	Course Title	Credit Attempted	Credit Earned	Grade
MATH3423	Statistical Inference	3.0	3.0	P
MATH4983R	Independent Study: Mathematical Models in Economics: Voting and Matching	3.0	3.0	A+

TGA: 4.300
CGA: 3.901
GGA: 3.934 (BSc)

Name: HSU, Ke-cheng 許可證
Student ID: 20312538
Year of Study: 4th Year
Print Date: 24 August 2026 17:23:09
Reg Status: Active in Program

Unofficial Transcript of Academic Record (as of 24 August 2026)

Cumulative Credits Earned: 130.0
Cumulative Transfer Credits: 3.0
Cumulative Credits Counted towards Degree: 130.0

Awards: University Scholarship
Hong Kong University of Science and Technology Academic Achievement Medal

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2020-21 Fall (Full-Time)

Course Code	Course Title	Credit Attempted	Credit Earned	Grade
ECON5100	Mathematics for Business and Economics	3.0	3.0	P
ECON5210	Microeconomic Theory I	4.0	4.0	A+
ECON5250	Macroeconomic Theory I	4.0	4.0	A
MATH5411	Advanced Probability Theory I	3.0	3.0	A
PDEV6770C	Professional Development for Research Postgraduate Students	1.0	-	PP
PDEV6800H	Introduction to Teaching and Learning in Higher Education	0.0	-	P

TGA: 4.109
CGA: 4.109

Cumulative Credits Earned: 14.0

Awards: Postgraduate Studentship

2020-21 Spring (Full-Time)

Course Code	Course Title	Credit Attempted	Credit Earned	Grade
ECON5220	Microeconomic Theory II	4.0	4.0	A+
ECON5260	Macroeconomic Theory II	4.0	4.0	A+
ECON5300	Econometrics	4.0	4.0	A
PDEV6770C	Professional Development for Research Postgraduate Students	1.0	-	PP
SBMT6780	Professional Development in Ethics, Innovation and Technology for Research Postgraduate Students	1.0	1.0	P

TGA: 4.200
CGA: 4.157

Cumulative Credits Earned: 27.0

Qualifying Exam completed on 23 June 2021

Awards: Postgraduate Studentship

2021-22 Fall (Full-Time)

Course Code	Course Title	Credit Attempted	Credit Earned	Grade
ECON5620	Theory of Industrial Organization	4.0	4.0	A+
ECON6120T	Applied micro-econometrics	4.0	4.0	A-
PDEV6770C	Professional Development for Research Postgraduate Students	1.0	1.0	P

TGA: 4.000
CGA: 4.116

Cumulative Credits Earned: 36.0

Awards: Postgraduate Studentship

2021-22 Spring (Full-Time)

Course Code	Course Title	Credit Attempted	Credit Earned	Grade
ECON6120V	Platform Economics	1.0	1.0	A
ECON6990	MPhil Thesis Research	0.0	-	P
FINA7900A	Doctoral Seminar: Theoretical Corporate Finance	3.0	3.0	A-
FINA7900B	Doctoral Seminar: Theoretical Asset Pricing	0.0	-	AU

TGA: 3.775
CGA: 4.077
GGA: 4.084 (MPhil)

Cumulative Credits Earned: 40.0
Cumulative Credits Counted towards Degree: 34.0

Exclude in MPhil GGA: ECON5100, MATH5411 (GGA after exclusion: 4.084)

Name: HSU, Ke-cheng 許可證
Student ID: 20312538
Year of Study: 4th Year
Print Date: 24 August 2026 17:23:09
Reg Status: Active in Program

Unofficial Transcript of Academic Record (as of 24 August 2026)

Thesis Title [MPhil(ECON)]: Brand Search and Item Search

Awards: Postgraduate Studentship

2022-23 Fall (Full-Time)

Course Code	Course Title	Credit Attempted	Credit Earned	Grade
PDEV6800C	Introduction to Teaching and Learning in Higher Education	0.0	-	P

TGA: **
CGA: **

Cumulative Credits Earned: 32.0 (Internal Credit Transfer: 32.0)

Awards: Postgraduate Studentship
HKUST RedBird PhD Recruitment Award

2022-23 Spring (Full-Time)

Course Code	Course Title	Credit Attempted	Credit Earned	Grade
ECON5610	Cheap-Talk: Theory and Experiment	0.0	-	AU
LANG5002	Postgraduate English for Business and Social Science Studies	1.0	1.0	P

TGA: **
CGA: **

Cumulative Credits Earned: 33.0

Awards: Postgraduate Studentship

2023-24 Fall (Full-Time)

Course Code	Course Title	Credit Attempted	Credit Earned	Grade
ECON7800F	Economics Seminar	1.0	1.0	P
ECON7990	Doctoral Thesis Research	0.0	-	PP

TGA: **
CGA: **

Cumulative Credits Earned: 34.0

Awards: Postgraduate Studentship

2023-24 Spring (Full-Time)

Course Code	Course Title	Credit Attempted	Credit Earned	Grade
ECON7990	Doctoral Thesis Research	0.0	-	PP

TGA: **
CGA: **

Cumulative Credits Earned: 34.0

Awards: Postgraduate Studentship

2024-25 Fall (Full-Time)

Course Code	Course Title	Credit Attempted	Credit Earned	Grade
ECON7990	Doctoral Thesis Research	0.0	-	PP

TGA: **
CGA: **

Cumulative Credits Earned: 34.0

Awards: Postgraduate Studentship

2024-25 Spring (Full-Time)

Course Code	Course Title	Credit Attempted	Credit Earned	Grade
ECON7990	Doctoral Thesis Research	0.0	-	PP

TGA: **
CGA: **

Cumulative Credits Earned: 34.0

Awards: Postgraduate Studentship

Name: HSU, Ke-cheng 許可證
Student ID: 20312538
Year of Study: 4th Year **Reg Status:** Active in Program
Print Date: 24 August 2026 17:23:09

Unofficial Transcript of Academic Record (as of 24 August 2026)

2025-26 Fall (Full-Time)

Course Code	Course Title	Credit Attempted	Credit Earned	Grade
ECON7990	Doctoral Thesis Research	0.0	-	PP

TGA: **
CGA: **

Cumulative Credits Earned: 34.0

Awards: Postgraduate Studentship

2025-26 Spring (Full-Time)

Course Code	Course Title	Credit Attempted	Credit Earned	Grade
ECON7990	Doctoral Thesis Research	0.0	-	PP

TGA: **
CGA: **
Current GGA: ** (PhD ECON)

Cumulative Credits Earned: 34.0

Awards: Postgraduate Studentship

2026-27 Fall (Full-Time)

Course Code	Course Title	Credit Attempted	Credit Earned	Grade
ECON7990	Doctoral Thesis Research	0.0	-	**

TGA: **
CGA: **

Cumulative Credits Earned: 34.0

- End of Transcript -