Siqi Li (Thinkling)

Econometrics & IO Research

sli269@ucsc.edu • +1 (831) 419-1131
https://www.linkedin.com/in/siqi-li-thinkling/ • Campbell, CA

Experienced professional with a strong background in econometrics and industrial organization research, specializing in statistical modeling, and causal inference. Adept at synthesizing complex large-scale data to derive actionable insights. Skilled at experimentation and machine learning. Expert on auctions and large market models.

Technical Proficiencies

Software	SQL, Python (pandas, numpy, scikit-learn, PyTorch), R, MATLAB, Stata, LATEX
Data Visualization	ggplot (R), Matplotlib (Python), Excel, ArcGIS
Statistical Analytics	Bayesian Statistical Modeling, Simulation, Inference, Descriptive analysis, Time Series, Web scraping
Machine Learning	Supervised Learning (classification), Unsupervised Learning (clustering), Deep Learning (RNN)
Specialized Expertise:	Econometrics (Regressions & Forecast, Causal Inference, Structural Modeling), Industrial Organization

Research Projects

Measuring the Market Impact of Machine Learning Valuations in Auctions.   2022 – Present

- Analyzed 2.18M randomized experiment auction sale records from GoDaddy.com and assessed the market impact of machine learning valuations through comprehensive reduced form analysis and structural modeling.
- Measured the shifts in market behavior by reduced form analysis including OLS, Logistics model, Tobit model, Quantile regression, increasing the prediction accuracy with 3% improvement over baseline.
- Built 2-step structural model with endogenous entry to estimate unobserved optimal bids and the expected revenue.
- Our study highlights the need for auctioneers to tailor valuation disclosures to the auction format and competitive environment to optimize outcomes.

BLP Model in the Case with Large Number of Goods and Markets under Overlapping Simulation Draws.   2020 – 2022

- Derived the asymptotic distribution of the BLP estimator to estimate demand curves and provide an analytical standard error formula. My new method could reduce the computational cost in a significant magnitude because the number of simulation draws required could be much smaller than previous literature.
- Web scraped large video game sales data to demonstrate the applicability of our theoretical results.

Migration Experience Has Limited Negative Effect on Satisfaction: Evidence from China   2018 – 2020

- Integrated 2000 children and family member survey panel data across 15 years and analyzed the relationship between the life satisfaction of rural young people and their migration experiences.
- Enhanced prediction accuracy by 20% over baseline through variable selection and model optimization with fixed effect models.

Bubbles of P2P platforms in China, "A case study of Shanxi Province   2016

- Surveyed information of around 20 Chinese internet microcredit platforms, specifically P2P.
- Authored case study report for in-depth analysis and insights.

Career Experience

UCSC, Santa Cruz, CA, US   2020 – Present
Teaching Assistant

Lead small group discussions to delve deeper into course topics and encourage active student participation. Collaborate with professors to develop instructional materials, such as presentations, handouts, and online resources. Supervise and guide students during practical lab sessions, ensuring they understand techniques and procedures.

- Provided instructional support for graduate-level and upper-level undergraduate courses.
- Participated in meetings with professors and other teaching assistants to align teaching approaches and discuss course updates.

- Aided professors and students in research endeavors by offering assistance in data collection, analysis, and literature reviews.
- Highlight courses: Econ217 Applied Econometric Analysis II, Econ236 Financial Engineering, Econ113 Introduction to Econometrics, Econ114 Advanced Quantitative Methods

UCSC - AA/PIRC Resource Center, Santa Cruz, CA, US 2019 – 2020
Graduate Student Coordinator

Provided guidance to undergraduate interns in organizing their respective events. Initiated event promotion through creative poster design and video production. Collaborated with UCSC's Graduate Student Commons, Women's Center, and Health Center to ensure effective coordination between centers.

- Facilitated engagement of more than 200 graduate students on campus by fostering wellness level and promoting relationship-building.
- Managed three prominent graduate student wellness events: Desert Terrarium Workshop, A Postcard to Home, and Icy Time-DIY Resin Jewelry.

HKUST, Clear Water Bay, Hong Kong 2016 – 2019
Student Ambassador

Offered assistance during research-related events, including logistical arrangements, participant coordination, and content preparation. Collaborated with faculty and staff to organize outreach efforts targeting potential students. Gathered feedback from peers to enhance student services and campus experience.

- Participated actively in the undergraduate recruitment tour to Shanxi and Hebei, China.
- Delivered presentations to diverse audience of over 1200 students and parents from prominent high schools.

Greater China, Crown Worldwide Group, Shanghai, China 2017
Associate Sale & Market Researcher

Collected market data and consumer insights through various research methods. Advised managerial stakeholders on data-driven strategies by presenting well-founded analytical findings. Utilized statistical techniques to interpret data trends and provide actionable recommendations. Produced over 20 export documents for Shanghai Customs. Oversaw enhancement efforts for quotation system and consultant assessment system through VBA.

- Initiated communication with 65+ clients via phone and corresponded with 264 clients via email.
- Led two highly praised marketing research projects: "More Belts, More Roads" and "Advertisement Investment for Baidu Search Engine."

Executive Committee of Editorial Board - Student Union HKUST, Clear Water Bay, Hong Kong 2016 – 2017
Editor & Designer

Utilized Photoshop, InDesign, and Illustration to edit and design school magazines by showcasing strong graphic design skills. Researched relevant topics and gathered information to support content creation. Proposed new content ideas, design concepts, or strategies for improving overall engagement.

- Collaborated with other members to orchestrate events, including Book Exchange Program and O'day by demonstrating effective teamwork and organizational skills.
- Conducted interviews with a diverse range of individuals, including students and staff, as well as refugees in Yuen Long districts to gather insights and perspectives from over 20 participants for reporting purposes.

Education

Doctor of Philosophy (Ph. D) in Economics with an Emphasis in (Statistics), Ongoing

University of California, Santa Cruz

Core Modules: Introduction to Probability Theory STAT 203 | Intermediate Bayesian Inference STAT 206B | Stochastic Processes STAT 243 | Advanced Econometrics 1-2-3 | Advanced International Finance 1-3 | Advanced Microeconomics 1-2-3 | Advanced Macroeconomics 1-2-3 | Mathematics for Economics

Intercampus Exchange Program in Economics, 2020 - 2022 | GPA: 4.0/4.0
University of California, Berkeley

Core Modules: Semiparametric & Machine Learning | Seminar in Advanced Econometrics, 2020 - 2022

Intercampus Exchange Program in Economics, 2021 | GPA: 4.0/4.0
University of California, Los Angeles

Core Modules: Advanced Econometrics 3

Bachelor of Science in Mathematics and Economics, 2019 | First Honor
Hong Kong University of Science & Technology, Hong Kong

Core Modules: Differential Equation | Probability theory | Game Theory | Calculus II | Business Statistics | Energy & Related Environmental Issues | Understanding China - Data-Analytic Approach | China's Development in Historical & Comparative Perspectives | Introduction to Computing with Excel VBA | General Chemistry I & II | General Physics | Honors in Linear algebra | Abstract Algebra | Honors in Calculus I | Real Analysis I & II | Multivariable Calculus | C++ Programming | Machine Learning

Exchange Abroad Program in Economics, 2017
University of California, Berkeley

Core Modules: International Monetary Policy | Industrial Organization & Public Policy | Law & Society | Stochastic Processes

Awards & Affiliations

Fellowship | UCSC Economics Department, (Ongoing)

Volunteer | Social Service Team, HKUST, 2019

Awarded | Government Scholarship Fund, HKSAR, 2018

First Runner-up | "Civic Engagement for Our City's Future Public Policy Competition", HKSDRI, 2017

Top 5 | Volunteer Achievers, HKUST, 2017

Peer Mentor | School of Science, HKUST, 2017

Top 10 | Volunteer Achievers, HKUST, 2016

Awarded - Second Price | Student Math & Biology League, 2014

Awarded - First Price | Student Physics & Chemistry Competition, National High School, Shanxi, 2014

Languages

Fluent – English & Cantonese | **Native** – Mandarin | **Beginner** – French