LAUREN LINGYUN QU

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SKILLS & INTERESTS

- **Research Interests:** Family Economics, Macroeconomics, Labor Economics, Household Finance
- **Skills:** Structural Model Construction and Estimation (GMM, MLE); Empirical Design (DID, RD, Causal Inference); Computational Methods (ML, DSGE); Data Collection, Visualization & Statistical Analysis
- **Languages:** Chinese, English, Japanese, Korean (Fluent)
- **Technical:** Python, R, MATLAB, STATA, SAS, C++, Julia; Databases MySQL; LaTeX

EDUCATION

University of Chicago | Chicago, IL
MA, Social Sciences – Economics, September 2024 – Expected June 2025

Georgia Institute of Technology | Atlanta, GA
MS, Computer Science (Online), September 2024 – Present

Waseda University | Tokyo, Japan
BA, Economics, Summa Cum Laude, GPA: 3.9/4.0, Rank: 2/144, June 2023

Korea University | Seoul, South Korea
BA, Statistics, GPA: 92/100, June 2022

SELECT COURSEWORK

- **Graduate:** Microeconomics (PhD-Level), Macroeconomics (PhD-Level), Econometrics (PhD-Level), Statistics Inference （PhD-Level), Machine Learning, Deep Learning, Reinforcement Learning, Algorithms Design and Analysis
- **Undergraduate:** Time Series Analysis (Grad-Level), Mathematical Statistics (Grad-level), Probability Theory,Data Visualization with R, Statistical Experimental Method, Bayesian Statistics

RESEARCH EXPERIENCE

University of Chicago | Chicago, IL
Research Assistant - Prof. Oscar Gálvez-Soriano, June 2024 – Present

- Conducted regression analysis using redgfe and xtevent in STATA, comparing fixed effects and control variable choices to ensure accurate and reliable results.
- Tested parallel trends assumption via visualization and verified validity of DID approach.

University of North Carolina | Chapel Hill, NC
Research Assistant - Prof. Franklin Qian, January 2024 – Present

- Collaborated with team members to build structural micro model of firm decision between capital allocation and hiring.
- Expanded simple discrete two-period model to continuous infinite-period model. Calculated Hessian and Jacobian matrices for two-period model to check for convergence.
- Implemented dynamic programming; Visualized value function iteration process using Python.

University of Tokyo | Tokyo, Japan
Predoctoral Research Assistant - Prof. Nakata Taisuke, August 2023 – December 2023

- Collected mobility and traffic data from 42 websites of different prefectures with Python (BeautifulSoup, Scrapy).
- Conducted fixed effect regression to examine link between new Covid cases and variables (mobility, GDP loss) in STATA.

Waseda (Sōdai) University | Tokyo, Japan
Research Assistant - Prof. Kubota So, December 2022 – September 2023

- Examined relationship between housework and unemployment; Prepared empirical results in STATA and conducted comprehensive model validations, including IV test, robustness check, and alternative mechanism test.
- Utilized machine learning techniques to test theoretical models and conducted extensive numerical simulations and LOOCV analyses to verify key assumptions in R.

Emlyon Business School | Lyon, France
Research Assistant - Prof. Nguyen Giang, March 2022 – December 2022

- Conducted data cleansing for 3 million+ data in SAS; Used R for exploratory data analysis and visualizations.
- Applied clustering and KNN methods to explore relationship between social connectedness, private market capital allocation, and overall performance in R.

RESEARCH PROJECTS

Housing Price and Divorce Rates Regression Discontinuity Analysis, joint work with Mingzhe Chou, October 2024

- Developed a regression discontinuity (RD) design to analyze the impact of housing price changes on divorce rates in China,

utilizing a policy-driven discontinuity based on real estate regulations.

Python Gale-Shapley Algorithm Stability and Desirability Research, September 2022

- Designed evaluation metrics and demonstrated Gale-Shapley Algorithm outperformed random matching and nearest neighbor searching techniques in terms of stability and average matching rank in Python.

TEACHING EXPERIENCE

University of Chicago | Chicago, IL

Teaching Assistant - ECMA 33603 Intro to Macroeconomics and Financial Frictions (Prof. Andre C. Silva), January 2025 – March 2025

- Independently prepared detailed homework solutions in LaTeX, addressing key areas of student concern.
- Conducted weekly office hours, providing in-depth explanations and derivations to enhance student understanding.
- Collected and organized course feedback, facilitated communication between students and the professor.

University of Chicago | Chicago, IL

Teaching Assistant - ECON 11020 Introduction to Econometrics (Prof. Gálvez-Soriano), September 2024 – December 2024

- Prepared and delivered pre-recorded lecture videos, facilitated discussion sessions to reinforce key concepts, and held weekly office hours to provide individual support.
- Collaborated on problem set solutions and grading criteria; evaluated and graded all submitted problem sets without any complaint or regrading request from students.

PROFESSIONAL EXPERIENCE

Changchun National Development and Reform Commission | Changchun, China

Consultant, September 2023 – December 2023

- Managed and facilitated approval, validation, and review processes for investment projects entering Changchun City in accordance with regulatory authority defined by State Council.
- Monitored and assessed risks and potential hazards, including evaluating risks associated with crowd dynamics, adverse weather conditions such as blizzards, and fluctuations in commodity prices for investments.
- Provided insightful analysis and formulated relevant work recommendations to mitigate identified risks, ensuring proactive management and strategic decision-making.

China International Capital Corporation Limited | Beijing, China

Limited Fixed Income Intern, July 2023 – September 2023

- Conducted in-depth research on 25 ABS projects, including financing leases, accounts receivable, project final payments, and consolidated REITs; Analyzed creditworthiness of projects and completed credit evaluation reports.
- Analyzed macroeconomic trends and bond market movements; Assisted researchers in writing fixed income reports.
- Conducted financial analysis on target companies using absolute valuation methods; Automated the calculation process of EBIT, WACC, equity cost, and other data with Python.

Meituan | Beijing, China

Strategic Investment Intern, April 2023 – July 2023

- Authored desk research report on Japanese food delivery market; Conducted in-depth research on macro policy, historical and current development of the industry, and competition situation.
- Conducted financial research on both listed and unlisted companies in target industry using relative valuation methods.
- Analyzed operating performance of companies in the enterprise software industry; Deconstructed financials into 16 indicators, such as operational metrics, SaaS metrics, startup company indicators, and customer indicators.
- Supported work process of the strategic investment team through expert interviews and desk research.

Business Analyst Intern, February 2021 – September 2021

- Used SQL and Python for efficient data mining and analytics, integrating internal and external data sources, developed over 20 statistical models and reports with visualizations and interactive dashboards.
- Conducted extensive market research, producing over 15 weekly reports, and created a comprehensive metrics system using Excel VBA that covered customer base, order volume, transaction volume, profit, etc.
- Devised novel system design for evaluating complexity rating of takeaway restaurants, decomposing complexity into 16 variables and constructed automated data collection procedure and rating evaluation system for 15M+ restaurants.

Nomura Research Institute | Beijing, China

Business Analyst Intern, April 2022 – July 2022

- Benchmarked the hydrogen vehicle market and developed a competitive landscape analysis of 5 leading firms
- Consolidated key data and indicators of client companies, identified major factors affecting strategic growth with internal database statistics and developed targeted proposals, produced 10+ weekly reports

Industrial Securities | Shanghai, China

Equity Research Analyst Intern, September 2021 – December 2021

- Analyzed social service & retail industries, particularly duty-free sector; Utilized Python to collect and visualized diverse data.
- Produced in-depth industry research report, featuring market forecasts and investment recommendations.

- Applied advanced Python coding to gather and analyze more than 200,000 rows of data on 88 variables, covering asset quality and return for over 20 A-share companies; Developed financial models and produced five independent reports.
- Conducted extensive fundamental research, encompassing operations and financial summaries, near-term catalysts, and valuations based on DCM and EV/EBITDA methodologies.

OTHER EXPERIENCE

University of Chicago | Chicago, IL
Organizer of Brown-Bag Seminar for the Department of Economics, September 2024 – Present
- Coordinate seminar logistics, including securing venues and promoting events to students from various programs.

AWARDS

University of Chicago | Chicago, IL
M.A. Director's Scholarship (merit-based)
Social Science Promise Scholarship
Gargoyle Research Scholarship

Korea University | Seoul, South Korea
CAMPUS Asia Scholarship

Waseda University | Tokyo, Japan
Japan Student Services Organization Scholarship (JASSO)