Jesse Yu-Chieh Kuo

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Current Position

The University of Chicago Booth School of Business Chicago, Illinois
*Research Professional to Professor **Rimmy E. Tomy*** *Jul. 2024 - Present*

Education

The University of Chicago Booth School of Business Chicago, Illinois
*Research Professional to Professor **Rimmy E. Tomy*** *Jul. 2024 - Present*

National Taiwan University Taipei, Taiwan
B.B.A. in Information Management; ***GPA: 3.93*** *Magna cum laude* *Sep. 2018 - Jun. 2023*

- **Ph.D.-level Economics Courses:** Microeconomics, Econometrics, Bayesian and Network Econometrics, Computational Methods for Econometrics, Economic Analysis of Social Networks.
- **Ph.D.-level Business Courses:** Game-Theoretic Approach Marketing, Information Economics, Platform Strategy.
- **Computer Science Courses:** Text Mining (Ph.D.-level), Machine Learning (Ph.D.-level), Data Structure and Advanced Programming, The Design and Analysis of Algorithms, Database.
- **Mathematics Courses:** Analysis, Advanced Statistics (Ph.D.-level), ODE/PDE, Operations Research, Convex Optimization (Ph.D.-level), Machine Learning Theory (Ph.D.-level).

Research

Behavior and Data Science Research Center, National Taiwan University
*Research Assistant to Professor **Chih-Sheng Hsieh*** *Jun. 2022 - Present*

- Implemented regressions to analyze the effect of big events and spillover in the MeToo movement after adopting West (2021) to calibrate the normalized Google Trends time-series data and build a complete two-year panel dataset.
- Employed the network analysis approach to examine suburbanization and rural labor performance in China by using SQL to utilize a 200GB telecom dataset with tens of billion entries for the communication networks of mobile phones.
- Estimated the impact of users' friendship network sizes, behaviors, and patterns on users' selection of tariff plans, call durations, and cellphone models and extended to the marketing research.

Department of Economics, National Taiwan University
*Research Assistant to Professor **Yu-Chang Chen**, **Hsin-Tien (Tiffany) Tsai**, and **Ming-Jen Lin**, in **CCL Lab*** *Aug. 2023 - Present*

- Explored user behaviors and patterns and their purchasing results by using data from a large e-commerce platform.
- Worked on extending Jeziorski and Segal (2015) to estimate consumer impatience in various markets using our dataset.
- Proposed research plans to evaluate and improve the usage and efficiency of research funds by the government.

Department of Information Management, National Taiwan University
*Research Assistant to Professor **Chih-Ping Wei*** *Jun. 2022 - Feb. 2023*

- Conducted literature reviews in economics, management, marketing, and finance applying sentiment analysis.
- Worked on modeling the confidence level of information from online reviews toward varying sentiment and arousal.

Independent Research

Political Sentiment Analysis: A Survey of U.S. Media's Attitude toward China Before and After the Presidential Election

Term Project for Text Mining *Fall 2021*

- Employed sentimental analysis and natural language processing to investigate the media's attitude before and after the presidential election in the U.S. and incorporated accessible data sources and APIs.
- Polished pre-collected 6000+ Twitter data and examined the text's cosine similarity with TF-IDF and word embedding.
- Experimented with the performance of different natural language analysis and sentiment analysis packages and methods, then verified the sentiment change of medias and found the semantic differences between pre-/post-election articles.

Online-Offline Retailing Cooperation with BOPS Scheme under Price Competition

Term Project for Information Economics *Spring 2021*

- Surveyed tens of marketing literature related to the topics of cooperation and competition between online and offline retailers and their relationships, especially the adoption of the BOPS (Buy Online and Pick up in-Store) strategy.
- Formulated a game-theoretic model to analyze the cooperation relationship between online and offline retailers.
- Discussed the firm's efficiency and incentive compatibility to derive the conditions for successful cooperation.

Skills

Programming: Python, SQL, Stata, R, Julia, shell scripts, C++, Git/Github, Markdown, LaTeX.

Python Package: NumPy, pandas, cuDF, Matplotlib, seaborn, TensorFlow, PyTorch, NLTK, scikit-learn, SciPy, statsmodels, BERT, pytrends, Requests, beautifulsoup4, CVXPY, RegEx, Gurobi, NetworkX, geopy, Folium, PyBLP.