Zhuojun Lyu

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EDUCATION

New York University   *Sept 2021 - May 2023*
Master of Science in **Applied Statistics for Social Science Research**   *GPA:3.95/4.00*
Courses: Advanced Causal Inference Designs, Data-Driven Methods for Policy Evaluation, Messy Data and Machine Learning

The Chinese University of Hong Kong   *Sept 2017 - Jun 2021*
Bachelor of Science in **Financial Statistics**   *GPA:* 3.55/4.00 (Ranking: 6/65)
Courses: Time Series, Econometrics, Regression Analysis, Stochastic Processes, Statistical Models in Financial Markets;
Honors: Undergraduate Research Awards 2020; Dean's List 2017-18 & 2018-19 & 2020-21; 2nd Place in the PwC's STEM Challenge 2020; Honorable Mention in Mathematical Contest in Modeling 2019

SKILLS

Software: Proficient in **R, Python, Tableau, MySQL** and **Microsoft Office**; Basic in **MATLAB** and **STATA**
Languages: English (Full professional proficiency), Chinese (Native)

PROFESSIONAL EXPERIENCE

FPWA, New York City, US   ***Fiscal Policy Research Intern***   *May 2022 - Dec 2022*
- Used API to extract around 1 million records of federal and state grants in NYC's public domain.
- Analyzed trends in federal spending for NYC human services over past 12 years, with a focus on changes during pandemic.
- Employed logistic regression and propensity score matching to evaluate effectiveness of public assistance programs in NYC.

New York University, New York City, US   ***Graduate Teaching Assistant***   *Sept 2022- Dec 2022*
- Graduate Course Assistant of *Intermediate Quantitative Methods*.
- Led weekly lab sessions to teach R programming and review statistical methods.
- Assisted faculty with grading for a class of 60+ students and held office hours.

Jones Lang LaSalle, Shenzhen, China   ***Strategic Consulting Intern***   *Aug 2020 - Sept 2020*
- Consulting project: Optimized the layout of business districts in Shenzhen.
- Crawled data of 1000 business districts in Shenzhen; Utilized Baidu API to match longitude and latitude for districts.
- Adopted Python to construct a heat map containing info of each business district: location, size, and passenger volume.
- Classified business districts using clustering/matching methods based on advantages such as geographical advantage.

RESEARCH EXPERIENCE

Motor Speech Lab, New York University   ***Graduate Research Assistant***   *Mar 2022- May 2023*
- Utilized linear mixed-effect models to evaluate efficacy of DTTC treatment based on data from an ABAB experimental study involving 7 children with severe CAS.
- Tested estimation performances of different statistical models (Binomial, Quasi-Poisson, and Negative binomial) in over/under-dispersion datasets. Simulated 24,000 times and evaluated bias & mean square error for each model.

School of Management and Economics, CUHK   ***Undergraduate Researcher***   *Jan 2020 - Sept 2020*
- Developed three methods (Hedonic Regression, Propensity Score Matching, and Nearest Neighbor Matching Method) to document school zone premium embedded in housing prices in Shenzhen.
- Employed Diff-in-Diff (DID) method to quantify impact of primary school admission policy on school zone premium.
- Received Undergraduate Research Awards 2020.
- Jiaofen Hu, Shuai Ye, **Zhuojun Lyu**, and Taojie Wang (2022). Primary school zone premium distribution in first-tier city in China.

School of Management and Economics, CUHK   ***Research Assistant***   *Jun 2019 - Apr 2020*
- Topic: Whether China's Urban Housing Price Growth Will Exacerbate Wealthy Inequality.
- Implemented a case study to analyze impact of opening of a subway line on housing price.
- Used Google Earth Engine to obtain NOAA satellite data, including remote sensing data of night lights over past eight years; implemented Gaussian blur on satellite pictures, and calculated gray-scale values to estimate city expansionary rate.
- Utilized K-means clustering to fill missing values of China Household Finance Survey.
- Paper accepted by *15th North American Meeting of Urban Economics Association*.

Publications

- Maria I. Grigos, Julie Case, Ying Lu, and **Zhuojun Lyu** (2023). Dynamic Temporal and Tactile Cueing: Quantifying speech motor changes and individual factors that contribute to treatment gains in childhood apraxia of speech. *Journal of Speech, Language, and Hearing Research*. doi:10.1044/2023_JSLHR-22-00658.

Competitions

- **2019 Mathematical Contest in Modeling**: Evacuation Plan Based on Ant Colony Model, Floyd Model, and JEE Model, Prize of Honorable Mention
- **2020 PwC's STEM Challenge in Greater China,** Applying Social Engineering in Establishing Enterprise Privacy Protection System, Second Prize