

Zixuan (Lydia) Liu

(805) 869-9616 | zix7iu@ucla.edu | [Zixuan LinkedIn](#)

EDUCATION

University of California, Los Angeles (UCLA)

Los Angeles, CA

B.S. in Mathematics/Economics, B.S. in Statistics & Data Science | GPA: 3.99/4.0

Sep. 2023 – June 2025

University of California, Santa Barbara (UCSB)

Santa Barbara, CA

B.S. in Financial Mathematics and Statistics | GPA: 4.0/4.0

Sep. 2021 – June 2023

WORK EXPERIENCES

Data Analyst Intern

July 2023 – Aug. 2023

Meituan Dianping Co., Ltd

Beijing, China

- Built dashboards with SQL to track 400+ salespeople's daily KPIs, analyzed and ranked performance for teams across 16 provinces, highlighting top performers and underperformers to address problems such as customer visiting issues.
- Predicted regional sales with XGBoost machine learning model in Python, used Grid Search to tune hyperparameters to fit historical sales trend, tested and added predictors like weekly settled merchants and customer repurchase rate.
- Established sales target for teams and individual salesperson based on a mixed-effects model; devised rules for performance incentive competitions according to key indicators, stimulating higher efficiency and improving overall KPI by 25%.

Business Analyst Intern

July 2022 – Aug. 2022

JD.com, Inc.

Beijing, China

- Developed a logistic regression model to evaluate risk profiles for stores based on predictors such as accusation frequency, registration duration, and daily management activity, reducing time for compliance checks by 30%.
- Collected 30,000+ customer ratings data for shopping experience, cleaned missing values with R, used k-means clustering to categorize stores into different rating levels based on service quality, customer' ratings, revisit rates, etc.
- Segmented and categorized 600+ users' feedback texts with spaCy library in Python, isolating irate comments with sentiment analysis through TextBlob library; measured term frequency to identify major concerns within the feedback.

Marketing & Analysis Intern

July 2021 – Sep. 2021

Beijing Huihuijia Technology Co., Ltd.

Beijing, China

- Tailored and edited product promotional TikTok videos with CapCut; managed the brand's TikTok account, increased the follower base by 20% using targeted engagement strategies, such as personalized comment responses.
- Visualized livestreaming performance data with line charts in Excel to track and compare key metrics including sales, total views, number of shares, add-to-cart rate, purchase conversion rate, etc.

PROJECTS

Bandit Algorithms in Chemical Reaction Applications

May 2024 – Present

- Defined classes for regret algorithms in Python and implemented reinforcement learning bandit models in chemistry reaction applications to optimize experimental proposals and identify optimal conditions for chemical reactions.
- Conducted simulation to introduce experiment noises to the current dataset with NumPy in Python, and validated the performance of optimal bandit algorithms with various random noise level.

Joint Commitment in Human Cooperation Task

Mar. 2024 – Present

- Developed a real-time interactive web application for multiplayer game in Angular with Python, TypeScript, JavaScript, and HTML, and modified the application to adapt to varying numbers of users and various trials.
- Deployed the web application on a public server and assisted in collecting movement trajectory data from users.

Opioid Use Disorder Treatment Stages

Apr. 2024 – Dec. 2024

- Pre-processed data from Medicare database using SAS DATA Step, compared time spent in each treatment stages with ANOVA, and created grouped bar charts for annual patient distribution from 2018 to 2023 across stages.
- Evaluated the impact of treatment initiation timing on relapse rates using a Marginal Structural Cox Model, demonstrated a 6% reduction in relapse following the removal of prior authorization requirements.

ADDITIONAL

Programming Languages: Python, R, SQL, SAS, C/C++, JavaScript, TypeScript, MATLAB

Systems and Tools: R Studio, Git, mySQL, LaTeX, Angular, HTML, Tableau, Photoshop, Power BI, Microsoft Office

Activities: Math Motivator Tutor, NetEase Music Personal Account (5K followers), Piano (ABRSM Level 8), Archery, Origami