

# Haolan Mai

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## EDUCATION

### University of California, Berkeley, Berkeley, CA

Expected May 2023

Master of Analytics; Relevant coursework : Analysis and Design of Database Systems, Application in Data Analysis

### University of California, Los Angeles, Los Angeles, CA

Class of 2022

B.S in Statistics, Minor in Mathematics, GPA:3.91/4.0;

Relevant coursework: Data Analysis&Regression, Monte Carlo Methods, Computation & Optimization with R, Data Mining, ML

### City College of San Francisco, San Francisco, CA (GPA: 3.9/4.0)

May 2020

## WORK EXPERIENCE

### YMCA of Metropolitan Los Angeles

Los Angeles, CA

*Analytics Consultant-Part Time*

January 2022 - March 2022

- Cleaned, aggregated and restructured questionnaire data of different YMCA programs by creating pivot tables in Excel for data summarization. Visualized pre-questionnaire and post-questionnaire to identify key learning expectations using R
- Analyzed retention-related factors in R; built 4 interactive dashboards for 4 YMCA programs, using Tableau to track student attendance, student satisfaction, knowledge retention and other retention factors ; resulted in 3.7% increase in retention rate.

### ByteDance

(Remote) Beijing, China

*Data Analyst - Part Time at Douyin*

October 2021 - December 2021

- Utilized Market Basket Analysis algorithm (Python) to quantify the association between different reservation products and shed light on the design of the product bundles, which increased sales by 6.7%; Developed PySpark ML pipelines to identify customers at high risk of churn and provided insights into the leading indicators, thereby driving preemptive actions with 3% uplift retention.
- Proposed, designed and presented the new customer acquisition and retention metrics in Tableau, which helped the team achieve precise understanding of the customer life cycle, and increased customer retention rate by 1.3%

### UCLA Anderson School of Management

Los Angeles, CA

*Data Analyst - Part Time*

September 2021 - December 2021

- Automated data scraping from travel websites (e.g. TripAdvisor.com) using BeautifulSoup in Python and mapped every hotel of the Comptroller revenue dataset with detailed marketing characteristics, including target customer styles, user reviews, etc
- Compiled and built a rare firm-level revenue database(PyHive) on the full population of Texas hotels with their monthly paid taxes from 2000 to real-time updates, and leveraged Pandas to clean and upgrade datasets
- Conducted regression analysis (Python) to analyze price differences and trends of gap to explore key influential factors on marketing and quality levels in hospitality industry
- Studied pre-pandemic and post-pandemic travel demand, and discovered that travel demand decreased 60% during pandemic

### Industrial and Commercial Bank of China

Guandong, China

*Analytics Intern*

July 2019 - August 2019

- Tripled the success rate of ICBC credit product promotions by identifying the target population with K-means Clustering (R); sales of credit product increased by around 20 products per week. Acquired user feedback from ICBC website with API and prioritized the responses with sentiment analysis to achieve around 80 good customer-service rating uplift per day(Python)
- Complied economic/financial data (income, age, etc), performed statistical analysis of local economies/industries/business and used the result to find potential customer of mortgage loans/measured risk(Python); achieved 10-customer uplift per week

## RELEVANT COURSE PROJECTS

### Forecasting Video Game Sales (Python) - Machine Learning

March 2021 - June 2021

- Conducted Data Preprocessing, EDA, Feature Engineering over the dataset called 'Video Game Sales with Ratings' with 10k+ video game companies obtained from web scraping (BeautifulSoup) ; fitted, tuned , evaluated and interpreted different models using Python, including Linear regression, Regression Tree, Random Forest, and GBDT.
- Made the pipeline of best model for forecasting sales which is GBDT with lowest RMSE ready for potential game developer.

### Hotel Management Database Design(SQL) - Analysis and Design of Database Systems

August 2022 - December 2022

- Successfully collected and organized data using qualitative approach from 50 hotels, overcoming challenges in minimizing bias in data collection. Created and implemented a relational schema in MySQL , and developed a system(Shiny) for recommendations for online travel company's customers to choose hotel and room during Christmas season.
- Utilized SQL to write queries and R for data visualization to determine like popular room types during Christmas to help the company to decide on their pricing strategies, room type allocation, and marketing efforts during the Christmas season.

## PROFESSIONAL SKILLS

- Programming and Analytical Tools: R, Python, SQL, Tidyverse, NumPy, Sklearn, Pandas, Scipy, Spark, Hive, AWS, Tableau
- Data Science Skills: Machine Learning, Data Mining, Statistical Inference, Hypothesis Testing, Regression, Optimization, Data Analysis, Relational Database Management(Schema Design), Text Mining, Data Visualization, Natural Language Processing