Jiayi (Jeremy) Cao

Los Angeles, CA 90024 • (+1) 424-402-9580 • jiayi.cao.2022@anderson.ucla.edu • LinkedIn • GitHub

EDUCATION

UCLA ANDERSON SCHOOL OF MANAGEMENT Los Angeles, CA
Master of Science in Business Analytics *(MSBA, F1 STEM OPT Visa)* *December 2022 (Expected)*
Machine learning, Database management, R programming, Optimization, Prescriptive Models, Customer Analysis

UNIVERSITY OF CALIFORNIA, DAVIS Davis, CA
Bachelor of Science in Managerial Economics with Minor in Statistics *Sept. 2015-March. 2020*

TECHNICAL SKILLS

Programming Languages: Python (NumPy, Pandas, Matplotlib, scikit-learn, seaborn), R (dplyr, ggplot2, randomForest, multcomp)
Analytics: Database Management, Machine Learning, Operations Optimization, A/B Test, Heatmap, Data Visualization, Neural Network, K-Means Clustering, Data Analytics Storytelling
Tools and Software: MariaDB, MySQL, Jupyter Notebook, Tableau, Amazon AWS
Languages: English and Chinese bilingual

PROFESSIONAL EXPERIENCE

IPSOS Shanghai, China
Data Analyst, Volkswagen account Aug. 2020 – Apr. 2021

- Built first social-listening database in automotive industry in China; established and tested SQL queries for 20+ automotive brands to locate 'Emotion Recognition Data' across multiple social platforms from social-listening BI database
- Implemented A/B testing based strategic consulting proposals for Volkswagen's social media marketing team to improve their user engagement gains per dollar spent, increasing weekly user activation by ~400% and follower numbers by ~700%
- Loaded, extracted, and validated user's data, conducted consumer analysis of user behaviors with Python based on over 100K rows of social listening data's play volumes/likes/comments, etc.; generated product improvement recommendations for 20+ vehicle models and achieved ~50% MoM sales growth for 3 models.

XHUB SPACE San Jose, CA
Data Analyst Intern Jun. 2019 – July 2019

- Conducted A/B test on 15 competitive brands' Amazon sales data and applied SWOT analysis on products of a cross-border e-commerce company; recommendations led to marketing strategy adjustments and increased sales revenue
- Created strategic proposal to transform client company's consulting strategy, including product positioning, supply chain, and marketing leading to a ~30% Q4 revenue gain and company's first profitable year after three consecutive years of loss.

ENTREPRENEURSHIP

YC AUTO GROUP Pittsburg, CA
Co-Founder & Business Analyst Dec. 2016 – Sept. 2021

- Started pre-owned car dealership business and achieved a sales record of $300K in less than three years
- Applied "specific identification method" for inventory pricing strategy and decision making, increasing profit by ~60% above expectations
- Used R to perform log regression on sales data over past four years and found strong profit advantage of selling high-end sport cars, shifting strategy from low-end wholesale to high-profit luxury car sales, increasing profit by ~25% YOY.

ANALYTICS PROJECTS

Airbnb Price Optimization | UCLA Anderson Jan. 2022 – Feb. 2022
https://github.com/jiayicao2015/Gurobi

- Used Gurobi optimization tool to build and train models to minimize error term to predict Airbnb price based on 1700 Airbnb listing data in Hollywood, CA
- Found and analyzed top three features influencing the Airbnb price and built prediction model based on different scenarios

Credit Card Default Detection | UCLA Anderson Sept. 2021 – Dec.2021
https://github.com/jiayicao2015/creditcarddefault.git

- Defined metrics and designed unsupervised machine learning model to detect credit card default to improve Taiwan-based credit card issuer's current system. Improved accuracy by ~10% and precision by ~7% (by confusion metrics/ROC curve)
- Cleaned the customer historical data into 5000 rows of training set and 3000 rows of test set; used Python to build logistic regression/neural network/random forest models with hyperparameter to choose best model

Adobe Analytics Challenge | UCLA Anderson Sept. 2021 – Oct. 2021

- Used Cohort Table of the Adobe Analytics tools to perform A/B testing on difference in sales volume data between **Disney website** and mobile app, generated improvement scheme on platform weights, referral discount and location differences.
- Applied analysis on relative behaviors for subsequent purchases, provided improvement scheme on increasing come-back purchase