

Amber Tsao

✉ ambertsao@g.ucla.edu 🌐 [ambertsao](https://ambertsao.netlify.app/) 🌐 <https://ambertsao.netlify.app/>

Education

University of California, Los Angeles (UCLA)

Bachelor of Science in Statistics & Data Science, Economics (Expected June 2024)

GPA: 3.96

College Honors Candidate

Coursework: statistical programming, linear models, data analysis and regression, design and analysis of experiments, data mining, computation and optimization for statistics, Monte Carlo methods, econometrics, time series analysis and economic forecasting

Research Experience

UCLA Department of Statistics & Data Science (Los Angeles, CA)

Undergraduate Researcher with Professor Almohalwas (April 2023 - June 2023)

Implemented text mining techniques such as sentiment analysis, word frequency analysis, and topic modeling to analyze and compare the writing of ChatGPT to humans

Presented findings in a powerpoint presentation displayed during UCLA's 2023 Undergraduate Research & Creativity Showcase

Wrote a scientific research paper submitted to the *Undergraduate Research* journal

Academic Projects

Kaggle Competition - Predicting Car Accidents' Severity

Competition Participant (November 2022 - December 2022)

Analyzed a dataset with 50,000 observations and 40+ variables using data mining techniques to classify car accident severity in R

Used imputation methods to impute missing values to preserve observations

Utilized understanding of accident trends to create new important variables from the existing data

Presented and wrote about the final random forest model with team members

Kaggle Competition - Predicting Winning Proportions in USA College Basketball

Competition Participant (February 2022 - March 2022)

Analyzed a dataset with 1000+ observations and 20+ variables and developed regression models to predict winning proportions in USA college basketball using R

Applied visualization techniques to generate graphs and diagrams to support the proposed model

Collaborated in a joint class paper to discuss the model mechanisms and results

Internship Experience

ZERO - The End of Prostate Cancer (Remote)

Marketing and Communications Intern (June 2021 - December 2021)

- Assisted in the debugging and enhancement of the nonprofit organization's website in a search engine optimization (SEO) project
- Proposed improvements of the organization's marketing ads on Youtube and Facebook
- Applied understanding of current events and predicted website visitors' behaviors to choose external news articles to consistently upload to the website on a weekly basis

City of Hope National Medical Center (Duarte, CA)

Research Intern (June 2019 - August 2019)

- Independently researched and interpreted patterns in colorectal cancer cases
- Supported a research team by communicating updated information on the SMAD4 cancer gene
- Gathered and organized 400+ colorectal cancer patients' medical data in Excel
- Assisted a research team with a medical research paper published in *Cancers*

Leadership Experience

KBM Dance UCLA (Los Angeles, CA)

Dance Lead, Administrative Assistant (September 2021 - Present)

- Led performances in groups of up to 30 people by communicating with members to ensure synchronization of dance moves and boost team morale
- Taught dances by accurately explaining moves to help teammates improve their skills
- Utilized knowledge of current trends and popular songs while considering members' dance abilities to help plan impactful setlists for group performances to market the team to the public

Skills

Microsoft Office, Google Suites, R, SQL, Python, data mining, text mining