KIANA MOHAMMADINIK

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EDUCATION

University of California, Los Angeles Expected Graduation: Jun. 2026

Master of Science in Biostatistics

University of California, Los Angeles Jan. 2023 - Jun. 2024

B.S. in Statistics and Data Science with a Minor in History

Santa Monica College Jan. 2020 - Jun. 2022

Associate of Arts, Liberal Arts, and Humanities, Graduated with Highest Honors

RELEVANT SKILLS / COURSEWORK

Data Wrangling, Data Visualization, Front End Development, Cloud Computing, Machine Learning, Experience with OLAP and BigQuery, Linux Scripting, Probability, Mathematical Statistics, Programming With R, Data Analysis and Regression, Design and Analysis of Experiments, Computation, and Optimization For Statistics, Statistical Consulting, Data Mining, and Linear Models

RESEARCH / PROJECTS

Predictive Modeling of Diabetes Dataset

- Helped investigate which health indicators have the potential of predicting accurate diabetes diagnoses, acknowledging these indicators as signals rather than direct causes of diabetes.
- Explored the relative importance of these health indicators in predicting diabetes diagnosis by developing a prediction model via the R programming language.

Exploratory Analysis and Interactive Data Visualization with MIMIC-IV Clinical Data

- Analyzed ICU patient data from the MIMIC-IV database using R and SQL-based tools to support observational research.
- Used Arrow, DuckDB, and BigQuery to ingest, transform, and analyze large-scale hospital data both locally and in the cloud.
- Conducted exploratory analyses using tidyverse, lubridate, and ggplot2 to summarize and visualize clinical variables.
- Built a dynamic R Shiny application that connects to the MIMIC-IV clinical database through BigQuery to visualize ICU cohorts and patient-level timelines. The app enables users to explore demographics, vitals, and lab values interactively, and generates individualized plots of ICU transfers, procedures, and lab events. The app is designed to integrate multiple data sources in real time and support exploratory clinical research.

Civic Engagement Survey Analysis at UCLA

- Assisted with the data analysis of survey results from the UCLA Center for Community Engagement to evaluate the program's effectiveness on students' behavior in community engagement.
- Utilized linear mixed effects models, clustering, and text mining methods, and discovered significant discrepancies in the results among different student demographics, particularly between traditional and transfer students, as well as North and South Campus majors.

Associations Between Music And Mental Health

- Conducted biostatistical research under the supervision of Dr. Tsiang on a research project investigating the connections between music and mental health.
- Developed an analytical methodology inspired by relevant existing literature to identify statistically significant associations between an individual's personal music listening habits and their mental health.

WORK EXPERIENCE

Santa Monica College Feb. 2020 – Jun. 2022

Undergraduate Math Tutor

- Provided individual and group tutoring sessions to help students in mastering Calculus courses. Led and managed the class on days when the assigned professor was absent.
- Monitored student progress throughout the semester; identified areas needing additional support was needed and collaborated with the assigned professor to address them.