CHRISTOPHER FU

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EDUCATION

University of California, Los Angeles (UCLA) Expected Graduation Date: June 2026

M.S. Data Science in Biomedicine Overall GPA: 4.00/4.00

Relevant Coursework: Foundations of Data Science, Machine Learning Applications in Biomedicine, Data Science for Medical Imaging

Awards: University of California, Los Angeles Warren Alpert Computational Biology and Artificial Intelligence Scholar, Dean's Honor List

University of California, Los Angeles (UCLA) Graduation Date: June 2024

B.S. Data Theory Overall GPA: 3.79/4.00

PROFESSIONAL EXPERIENCE

Kaiser Permanente **Pasadena, CA**

Applied Data and Analytics Master's Intern Jun. 2025 - Present

- Spearheading a large-scale project to classify over 950,000 patient-to-physician messages from the Dermatology department (2021–2025) using NLP topic modeling techniques such as BERTopic and VAENSTM to streamline clinical triage and improve message routing.
- Conducted statistical analysis on CME Grand Rounds physician surveys using multiple linear regression ($R^2 = 0.49$) to identify engagement drivers, helping to inform improvements to survey design for yielding boosted physician response rates and feedback quality.
- Currently developing zero-shot classifier for labeling unseen dermatology messages as well as experimental survey designs for capturing new variables within physician feedback, partnering and communicating with stakeholders to align analytics with clinical goals

UCLA Biodesign **Los Angeles, CA**

Biodesign AI Fellow Sep. 2024 - Jun. 2025

- Leveraged SQL to process, clean, and integrate OB/GYN patient flow data from a dataset of 80,956 rows spanning 2022–2024; conducted exploratory analysis using visualizations to uncover trends in bed usage, delivery patterns, and departmental efficiency metrics.
- Designed, implemented, and evaluated an LSTM model to forecast weekly OB capacity trends, training on 2022–2023 data; achieved a test RMSE of 17.69, providing actionable insights to optimize resource and staff allocation, as well as enhance operational planning.
- Partnered with a team of six to analyze patient flow data within a school's comprehensive data repository; developed a project strategy, presented findings, and proposed actionable next steps, emphasizing opportunities to improve efficiency and data-driven decisions

Children's Hospital of Orange County (CHOC) **Orange, CA**

Data Science Intern Jun. 2023 - Aug. 2023

- Analyzed demographic disparities among diagnosed anxiety patients by constructing multiple linear regression models using Python's Statsmodels and SciPy libraries, achieving 77% accuracy; conducted t-tests and other statistical analyses to identify actionable insights.
- Led a team of four data science interns in delivering data-driven insights to physicians through visually engaging presentations; created bar plots, box plots, model summary tables, and geographical heat maps to highlight trends and promote predictive measures in mental health
- Developed and proposed detailed action plans for deploying advanced unsupervised machine learning techniques to uncover latent factors contributing to anxiety disorders in pediatric patients, supporting data-driven interventions and improved outcomes.

PROJECTS

Fingerhut Website Data Analysis **Los Angeles, CA**

Project Member Jan. 2024 - Mar. 2024

- Conducted exploratory data analysis (EDA) using Python libraries (numpy, pandas, matplotlib, seaborn, sklearn, scipy) and presented findings, delivering actionable insights to optimize Fingerhut's website interface for enhanced customer engagement and retention.
- Applied advanced feature engineering techniques, including vectorization of stage data, oversampling for class imbalance, and PCA for dimensionality reduction; developed Logistic Regression, Random Forest, and K-means models to evaluate feature importance
- Collaborated with a team of four to analyze Fingerhut customer journey data collected from the company's website, merging datasets to create a comprehensive view of navigation stages and labeling paths based on alignment with the company's ideal customer journey.

SKILLS

Programming: Python (NumPy, Matplotlib, SciKit-Learn, Pandas, PyTorch, Jupyter, SciPy), R Studio (ggplot2), SQL (Azure Data Studio)

Data Analysis & Machine Learning: Regression Analysis, Classification Models, Unsupervised Learning, Neural Networks (LSTM, VAE)

BI & Visualization Tools: Tableau, MS Excel, Google Sheets, MS Powerpoint, MS Word