Dylan Mochizuki

510-660-8600 | dmochi@ucla.edu

EDUCATION

University of California, Los Angeles Los Angeles, CA
Bachelor of Science in Statistics and Data Science Dec 2025

- Relevant Coursework: Probability, Data Mining, Machine Learning Concepts, Data Visualization and Cleaning

PROFESSIONAL EXPERIENCE

WeThink Remote
Data Science Intern Aug 2023 – Present

- Created an algorithm in Databricks to extract company data from Dataverse to streamline the process of analyzing large amounts of data, such as contacts within the company and their information, including sensitive fields like passwords
- Utilized a combination of pyspark functions and SQL queries to obtain a schema from JSON data
- Created a delta table of peer-reviewed scoring and commentary of over ten soft skills (eg. teamwork, communication) from members of the U.S. Air Force to improve their overall teamwork as a group
- Although the results were not presented to members of the Air Force, utilized tools such as Airtable and Power BI to visualize each individual's soft skill performance using radar charts

Bladium Sports and Fitness: Skills Institute Alameda, CA
Head Soccer Coach Sep 2021 – Aug 2023

- Instructed children (ages 5-13) with varying levels of soccer experience and gained confidence in projecting my voice and the ability to concisely present information
- Explored a variety of curricula to create an engaging and beneficial experience for my classes which increased my retention rate (kids coming back to the program) from 30% to 67%
- Combined popular school games such as "Red Light, Green Light" with soccer fundamentals which successfully sparked interest in my beginner classes, and sent several players to higher levels of play
- Learned the importance of accepting criticism and creating relationships with customers; worked alongside fellow coaches to increase the total size of our program from the top 5 to the top 2 in the nation

SKILLS

Programming Languages: Python (eg. scikit-learn, pyspark, NumPy, Pandas), SQL, R, Tableau
Tech Stack: DataBricks, Jupyter Notebook, Azure, Apache Spark, Tableau, Excel, Dataverse, LaTeX
Methods: Logistic Regression, Exploratory Data Analysis, Data Wrangling, Random Forests, Cross-Validation, Data Visualization, Hypothesis Testing, Data Lakes, JSON Data Processing, KNN, SVM

PROJECTS

End-to-End ML Project: Thyroid Sickness Determination | *Python, HTML* Jan 2025 – Present

- Cleaned and preprocessed dataset with extensive missing values, leveraging KNNImputer for numerical features and mode imputation for categorical features to improve model performance.
- Implemented data ingestion, transformation, and feature engineering to streamline model training and evaluation
- Applied multiple ML models (AdaBoost, CatBoost, XGBClassifier, Logistic Regression), leveraging OneHotEncoder for categorical feature processing, currently refining the model to mitigate potential data leakage or overfitting
- Built a Flask-based prediction pipeline with an HTML frontend for real-time user input and predictions
- Managed the entire project lifecycle using Git and documented it on GitHub for reproducibility

Predicting Basketball Game Outcomes | *Python, LaTeX* Nov 2024 – Dec 2024

- Utilized the machine learning method Random Forest using Python (scikit-learn, NumPy, Pandas) to predict the outcome of NBA basketball games using popular statistics from every game of the 2023-2024 season
- Achieved a testing accuracy of 71% and a training accuracy of 72% by utilizing cross-validation with 5 folds on three Random Forest models to find appropriate hyperparameters
- Acquired experience using LaTeX to present my findings and conclusions in a professional manner

Is it True That Money Can't Buy Happiness? | *Tableau* Jun 2024 – Aug 2024

- Utilized side by side scatterplots in tableau to examine the relationship between GDP per Capita, happiness, and several other factors from the World Happiness Report of 2022 dataset
- Presented my data visualization to the class along with several studies to support my findings and gained praise from the professor for my unique topic selection
- Gained experience working in a team with diverse skillsets and collaborated successfully despite time zone and availability differences