Akash V. Iyer

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EDUCATION

University of California, Berkeley Graduation: May 2025

B.A. Data Science | Concentration in Business and Industrial Analytics (GPA 3.436)

Relevant Courses: Data Structures, Data Science Foundations, Principles and Techniques for Data Science, Structure and Interpretation of Computer Programs, Essential Tools For Data Science, Probability & Statistics, Integral and Differential Calculus, Linear Algebra, Urban Data Analytics

TECHNICAL SKILLS

Programming Languages: Python, R, SQL, Java, Javascript, HTML/CSS, Scheme

Machine Learning: Deep Learning, Data Visualization, Statistical Analysis, A/B testing & hypothesis testing

Tools & Frameworks: Git, Amazon Web Services, Pandas, NumPy, Tensorflow, Keras, Tableau, Scikit-Learn, SciPy, Jupyter Notebook, Deepnote, Seaborn, Matplotlib, RStudio, ggplot2, Flask, Optuna

WORK & PROJECT EXPERIENCE

Data Science Researcher, Vice President of Social — *DataGood @ Berkeley* Jan 2023 – Present

- Conducted an in-depth data analysis study on education inequality by collaborating in a team of 12, convening bi-weekly to synchronize on project advancements and ensure efficient data science tool application
- Implemented a multiple linear regression model to predict the average SAT score of schools based on data aggregated on all schools in California, and presented findings to 70+ club members

Data Analyst — *Data Science Society @ Berkeley* Mar 2022 – May 2022

- Collaborated with 6 teammates led by experienced mentor to define novel data science problem
- Visualize heatmaps, histograms, scatter plots, and conducted hypothesis tests, investigating relationships between meat consumption, wealth, BMI, and life expectancy, across 190+ countries
- Developed 2D geographical visualizations with GeoPandas package and cleaned data with Pandas
- Aggregated data exploration and analysis process into slide presentation, presenting and communicating results to 100+ students

[Asteroid Classification](#) Jun 2023 – Jul 2023

- Executed end-to-end machine learning with CI/CD pipelines, modular & organized code, logging, and error handling, on joined data from NASA's JPL Database and Planetary Data System
- Deployed trained models on AWS cloud infrastructure, integrated with Flask web application framework
- Classified asteroids based on 8 spectral types with variety of ML models including XGBoost, CatBoost, Decision Trees, Random Forest, kNN, and artificial neural networks
- Experimented with techniques such as SMOTE, tuning class-weights, and ensemble techniques under stratified k fold cross validation to handle class imbalance and improve ROC metric

[Housing Prices in Cook County](#) Mar 2023

- Forecasted housing prices based using feature engineered attributes across 200,000+ row property dataset from Cook County, IL with L1 regularized linear regression model
- Designed and built data pipelines for processing data and optimized RMSE error with validation sets to prevent overfitting and maximize accuracy, and reporting relevant insights, with an RMSE of 260k on test data

[Measles, Electricity, and Life Expectancy](#) Mar 2022 – May 2022

- Produced a 13-page final paper with box, scatter, and histogram plots, with hypothesis tests all programmed in R, analyzing whether measles immunization or electricity access affects life expectancy more for 120 countries
- Performed data cleaning, statistically summarized, and analyzed World Health Organization data in RStudio and visualized plots with ggplot2

LEADERSHIP

Drum Major/Section Leader — *Live Oak Emerald Regime Marching Band* Apr 2017 – Aug 2021

- Led weekly leadership meetings on productivity, communication, collaboration, mentoring, and efficient goal setting
- Managed 120+ members, cultivating relationships, addressing concerns, and providing mentorship, conflict resolution, and constructive feedback, elevating team performance to a decade-high score at WBA championships

Tutor — *ConneXions Tutoring* Oct 2020 – Aug 2021

- Tutored 3-4 underprivileged students for 1 to 2 hours each week in Math, problem solving, and written skills
- Prepared study materials and lesson plans, and collaborated with tutor team, managing scheduling conflicts, task prioritizing, and charting the course of the non-profit's trajectory