# Adam McNelis Mahmoud

Berkeley, CA 94704 | February 2025
(916) 996-5404 adam.mcmoud@berkeley.edu linkedin.com/in/adam-mcnelis-mahmoud adammcnelismahmoud.com

## Education

**University of California, Berkeley** **August 2022 – May 2026 (Expected)**
B.A. in Data Science - *concentration in Applied Math and Modeling* *Berkeley, CA*
B.A. in Applied Mathematics - *concentration in Numerical Analysis* GPA: 3.9

## Experience

**Admissions Exam Reviewer** **February 2025 – Present**
*Stanford University Mathematics Camp (SUMaC)* *Remote*

- Holistically assess admissions exams for SUMaC (Stanford's advanced summer math program for rising high school juniors and seniors), evaluating students' mathematical creativity, logical reasoning, and proof-based problem solving beyond rigid rubrics.
- Deliver comprehensive written evaluations assessing students' mathematical creativity and problem-solving skills, shaping admission decisions for top candidates.

**Data Intern** **January 2025 – Present**
*Fung Institute for Engineering Leadership, UC Berkeley* *Berkeley, CA*

- Analyze student and alumni data to evaluate program impact, drive improvements, and inform strategic decisions for the Fung Fellowship and Master of Engineering programs.
- Maintain and develop databases for program operations and project management, utilizing Salesforce and Google tools to ensure accurate data entry and management.
- Develop data visualizations for use by teaching and program teams, sharing insights with internal and external stakeholders.

**Data Analyst** **September 2023 – Present**
*Enrollment Management (EM) Department, UC Berkeley* *Berkeley, CA*

- Query, clean, and visualize student demographic and academic data using Tableau, Excel, Python, and SQL.
- Collaborate with department heads and data analysts to communicate data insights, both in technical terms and in clear, accessible narratives, to inform strategic enrollment decisions.
- Conduct data analysis to determine the number of admissions required to meet in-state residency targets for the 2024 academic year, directly contributing to the enrollment of over 800 additional in-state students, a 1% increase compared to previous years.
- Develop the EM website by designing and implementing interactive, data-driven visualizations to showcase enrollment trends and student demographics. Write HTML code for specific elements to ensure accessibility and enhance the user experience.

## Technical Skills

**Coding**: Python, SQL, R, Java, HTML, CSS, JavaScript
**Libraries**: Numpy, Pandas, Scikit-learn, Matplotlib/Seaborn
**Data Analysis Tools**: Tableau, Excel, Google Sheets, Power BI, ATLAS.ti
**Specializations**: Data Wrangling, ETL, A/B Testing, Predictive Modeling

## Research

**Exploring Indian Non-Governmental Organization (NGO) Distribution** **January 2024 - May 2024**
*UC Berkeley Data Science Discovery Program* *Berkeley, CA*

- Collaborated with Daanmatch to analyze funding allocation for 10,000+ Indian NGOs, standardizing address data with RegEx and developing reproducible workflows using Git.
- Conducted exploratory data analysis, cleaning, and visualization in Python (Pandas, Seaborn, Matplotlib), presenting findings at the Data Science Discovery Program Symposium.

## Extracurricular

**MPS Scholars Program Mentor** **August 2024 – Present**
*Mathematical and Physical Sciences (MPS) Scholars Program, UC Berkeley* *Berkeley, CA*

- Mentor math majors in the MPS Scholars Program through bi-weekly group and individual meetings, providing academic guidance, sharing experiences, and fostering community to support their success.

## Projects

**Cook County Housing Price Prediction** | *Python, Scikit-learn, Pandas, Matplotlib, Seaborn* **October 2024**

- Built a predictive housing price model using Scikit-learn, applying EDA, feature engineering (outlier removal, log transformations, one-hot encoding), and linear regression on 500,000+ records.
- Evaluated model performance on validation data and mitigated potential biases by analyzing historical disparities and trends.

## Relevant Coursework

**Data Science:** Foundations of DS, Computational Structures, DS Principles, Data Structures, Numerical Analysis for DS
**Mathematics:** Multivariable Calculus, Linear Algebra, Discrete Math, Abstract Algebra, Analysis, Complex Analysis