

ADAM MCNELIS MAHMOUD

Berkeley, CA 94704 | March 2025

📞 (916) 996-5404 ✉️ adam.mcmoud@berkeley.edu 🔗 [linkedin.com/in/adam-mcnelis-mahmoud](https://www.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: 3.85

TECHNICAL SKILLS

Coding: Python, SQL, R, Java, HTML

Data Analysis Tools: Tableau, Excel, Google Sheets, Power BI, ATLAS.ti

Libraries: Numpy, Pandas, Scikit-learn, TensorFlow

Specializations: Data Wrangling, ETL, A/B Testing, Predictive Modeling

EXPERIENCE

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 – March 2025

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.

Admissions Exam Reviewer

February 2025 – March 2025

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 and recommendations, shaping admission decisions for top candidates.

RESEARCH

Analyzing Academic Resource & Funding Allocation at UC Berkeley

March 2025 - Present

UC Berkeley, Committee on Academic Planning and Funding Allocation (CAPRA)

Berkeley, CA

- Working under Dr. Stefano Bertozzi to investigate and communicate the financial profile of the UC Berkeley central campus ledger, departments, and divisions for the Academic Senate's committee CAPRA.
- Utilize UC Berkeley's central database CalAnswers to query campus and student data relating to finances and enrollment across all undergraduate and graduate programs; analyze and visualize relevant data to inform CAPRA on sources of revenue and loss.

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.

PROJECTS

Cook County Housing Price Prediction | Python, Scikit-learn, TensorFlow, Pandas, Matplotlib, Seaborn

October 2024

- Developed predictive models using Scikit-learn (linear regression) and explored TensorFlow for nonlinear regression, applying feature engineering techniques like dimensionality reduction, feature scaling, and data imputation on 500,000 housing records.
- Evaluated models with cross-validation, hyperparameter tuning, and MSE to assess generalization and reduce overfitting.

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