SAMREENA SIDDIQUI

samreena@berkeley.edu || LinkedIn || Portfolio || (408) 835 - 3864

EDUCATION

University of California, Berkeley **Graduation: May 2026**

B.A. Data Science, B.A. Cognitive Science | GPA 3.96

Relevant coursework

The Structure and Interpretation of Computer Programs, Data Structures, Foundations of Data Science, Linear Algebra and Differential Equations, Principles & Techniques of Data Science, Probability of Data Science

Foothill High School, Pleasanton CA **Graduation: June 2022**

GPA: 4.0 (unweighted)

EXPERIENCE

Jacob's Ladder Therapies **San Jose, CA**

Data Science Intern *June 2024 - Present*

- Developed and implemented advanced data visualization and analytical models on historical datasets, resulting in a 20% improvement in predictive accuracy for service performance and operational efficiency.
- Optimized survey design using statistical techniques, increasing response rate by 15%, and applied data analysis to generate actionable insights that informed business strategies for over 100 clients.
- Utilized data mining and statistical analysis on 200+ legacy surveys, uncovering key trends and patterns that drove data-driven decision-making in marketing and project management across the organization.

The Gomez Lab || Computational and Molecular Biology **Berkeley, CA**

Undergraduate Researcher *August 2022 - Present*

- Utilized R for RNA sequencing, converting biological files (FASTA, FASTQ) into amino acid sequencing data
- Shadowed and was mentored by in lab computational biologist.
- Implemented an organizational system in the lab to streamline the arrangement of equipment, materials, and solutions, resulting in increased productivity and efficiency.
- Designed experiments to assess the strength of neuronal connections, conducting extensive genotyping and PCR reactions to analyze results.

Neurotechnology at Berkeley || Software **Berkeley, CA**

Dementia Detection *May 2023 - April 2024*

- Actively developing machine learning algorithms aimed at predicting the presence of dementia utilizing voice biomarkers.
- Engaging in the process of cleaning voice recording data to effectively compress and diminish noise, facilitating subsequent analysis and further experimentation.
- Conducting comprehensive literature reviews, identifying key variables utilized in published papers to inform the foundation of project.

LEADERSHIP AND CLUB WORK

Big Data @ Berkeley **Berkeley, CA**

Data Science Content Creator *January 2024 - Present*

- Developed a comprehensive data science course, slated for release on EdX by May 2024, covering fundamental principles such as logistic regression, clustering, exploratory data analysis (EDA), and other essential topics in data science.
- Utilized DeepNote to code homework and assignments, incorporating HTML and Python along with associated packages such as Pandas, NumPy, SciKit, and more.
- Produced and published lecture videos for global dissemination, enabling access to educational content for students worldwide.

Brain Exercise Initiative **Berkeley, CA**

President *August 2022 - Present*

- Expanded club membership from 25 to 60 active participants within a single semester, fostering a more vibrant and engaged community.
- Initiated and broadened connections with Senior Center homes, increasing partnerships from 2 to 5 establishments.
- Conducted weekly team meetings, facilitating discussion, creating weekly summaries, and coordinating tasks for other executive members.
- Volunteering with seniors with dementia to enhance cognitive abilities through reading, writing, and conversation.

SKILLS AND INTERESTS

Coding Languages: Python: NumPy, Pandas, Matplotlib, Seaborn, SciKit,, R, Java, SQL, HTML & CSSS

Skills: Data Visualization, Hypothesis Testing, Data Wrangling and Clearning, Data Mining, Excel, PowerPoint, Problem Solving, Collaboration

Interests: Machine Learning, Big Data Analytics, AI, Deep Learning, Health Informatics, Behavioral Data Analytics; Avid guitar and tennis player, Baking amateur