# SARAH GOMEZ

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#### **EDUCATION**

### University of California, Berkeley

Berkeley, CA

MS MOLECULAR SCIENCE AND SOFTWARE ENGINEERING

August 2023 – Present

#### Pace University, Dyson College of Arts & Sciences

New York, NY

BACHELOR OF SCIENCE (BS) IN BEHAVIORAL NEUROSCIENCE | MINORS IN CHEMISTRY AND PSYCHOLOGY

May 2023

**GPA:** 3.80 | **Honors:** Dean's List, CSTEP Scholar

February 2020 – May 2023

**RELEVANT COURSEWORK** 

Machine Learning Algorithms | Principles & Techniques of Data Science | Organic Chemistry II | Molecular and Cellular Biology | Neurobiology | Systems Behavioral Neuroscience | Genetics | Cellular Biochemistry

#### **WORK EXPERIENCE**

THE COLLEGIATE SCIENCE AND TECHNOLOGY ENTRY PROGRAM (Certified through CITI Program) Research Assistant

New York, NY

May 2022 - May 2023

- Develop original research covering the correlation between Alzheimer's and Fertility
- Mentor and tutor the minority population at Pace University in Science, Technology, and Math
- Attend weekly enrichment seminars covering science-related topics

#### LABORATORY WORK

THE COLLEGIATE SCIENCE AND TECHNOLOGY ENTRY PROGRAM (Certified through CITI Program)

New York, NY

Undergraduate Research Assistant

October 2021 – May 2023

- Participated in and completed Bio Safety training for level I and II
- Practiced sterile environment technique
- Collected individual Caenorhabditis elegans to study effects of fertility with the intervention of RNAi

#### **ACADEMIC PROJECTS**

MACHINE LEARNING ALGORITHMS COURSE

September 2023 – December 2023

- Acquired foundational knowledge in mathematical optimization, statistics, and machine learning, including techniques like Deep Learning, Convolutional and Recurrent Neural Networks, and Graph Neural Networks, with a focus on applications in chemistry for tasks such as synthesis, property prediction, and molecular dynamics.
- Developed proficiency in applying optimization and statistical modeling to molecular science problems, enhancing understanding of the interplay between numerical optimization, statistical models, and machine learning in chemical contexts.

PRINCIPLES & TECHNIQUES OF DATA SCIENCE COURSE

September 2023 – December 2023

- Gained proficiency in data science methodologies, covering data processing, visualization, and predictive
  modeling in an intermediate-level course. Skilled in programming for data analysis, including machine learning
  methods like regression and classification.
- Developed abilities in computational and inferential reasoning, ready for advanced academic courses in data management and machine learning.

**GENETICS LAB COURSE** 

August 2021 – December 2021

- Performed yeast modification with CRISPR/CAS9 and conducted PCR
- Conducted transformation of competent cells with genetically engineered plasmid

## CONFERENCES/LEADERSHIP ACTIVITIES/ VOLUNTEER WORK

Nu Rho Psi Honor Society, Eta Chapter, Founder & Head Committee Organizer

April 2023 - May 2023

• The City Tutors NYC, Volunteer

November 2022 - January 2023

• The Society for the Study of Reproduction Conference, Spokane, WA

June 2022

• Neuroscience Club, Founder and President

November 2021 - May 2023

## **HONORS, AWARDS & AFFILIATIONS**

•	Independent Research in Biology Poster Award	May 2023
•	Dyson President Leadership Award, Neuroscience Club	May 2023
•	Setter Leadership Award for New Club Organization of the Year	April 2023
•	Beta Beta Beta Honor Society	May 2022 – Present
•	Society for the Study of Reproduction	May 2022 – Present
•	American Chemistry Society	May 2022 – May 2023
•	Student Leadership Award, Nominee	April 2022
•	Tau Sigma Transfer Honor Society	March 2021 – Present
•	Minority Association of Pre-Health Students	February 2021 – Present
•	French Modern Languages Award	January 2021

## **SKILLS**

## **Technical**

Microsoft Office (Word, PowerPoint, Excel, Outlook) | Google Suite (Docs, Sheets, Forms, Slides) | Apple Distinguished Certified (Pages, Keynotes, Numbers) | HTML | BBEdit | Teamwork | Zoom | Jupyter lab | Visual Studio Code

## **Programing**

Python | C++

## Libraries

Pytorch | Pandas | NumPy | Scikit-learn | Seaborn

## **Laboratory Techniques**

Record-keeping | Equipment maintenance and calibration of titration | Micro pipetting | Specimen handling

# Languages

Spanish (fluent) | French (intermediate)