REBECCA TSENG

BIOINFORMATICS AT UCSD

CONTACT

retseng@ucsd.edu

650-554-0333

https://www.linkedin.com/in/rebecca-tseng-23a11228b/

San Diego, CA

SKILLS

Tools: Github, Bioconductor, Jupyter Notebooks, IGV, UCSC Genome Browser, AWS, Vim

Languages: R, Java, Go, C, Bash (Shell Scripting), Python

Operating Systems: Windows, Linux

EDUCATION

University of California, San Diego

In Progress: *B.S., Bioinformatics with Minor in Computer Science*

Fall 2023 - Present

Expected Graduation: Fall 2026
GPA: 3.70

RELEVANT COURSEWORK

Statistics for Bioinformatics

Mathematics for Algorithms and Systems Analysis

Discrete Math

Data Structures in Java

Calculus for Science/Engineering

Software Tools/Techniques

Organic Chemistry

General Biology

AWARDS

Provost's Honors
Fall 2023, Winter 2024

PROFILE

Self-motivated undergraduate studying Bioinformatics with a strong foundation in both biology and computation. I am eager to apply my background in genomics and data analysis to contribute to biomedical research.

EXPERIENCE

Student Research Assistant

UCSD School of Medicine - Department of Pediatrics (Kyle Gaulton Lab) Jan 2024 - Present

- Assisting with multiomics project involving ER stress in beta cells, to help better understand complex disease, including diabetes (T1D and T2D).
- Used Bioconductor packages and scripting to run pipelines
- Tools Used: MAGMA, fGSEA, WGCNA, Seurat, IGV, UCSC Genome Browser

Undergraduate Bioinformatics Club

Sep 2023 - Present

- Attend workshops and networking events
- Participated in student mentorship program

Pre-College Computational Biology Program

Carnegie Mellon University July 5 - 22, 2022

- Conducted PCR and gel electrophoresis on bacterial river water sample to investigate the 16S rRNA gene
- Emphasis on microbiome analysis, sequence alignment, genome assembly, and evolutionary trees
- Applied algorithms to sequence and identify different variants of SARS-CoV-2

PUBLICATIONS

"Transcription Factor EB: The Next Target for Autophagy in Parkinson's Disease." ***Journal of High School Science 6 (2).*** 2022

OTHER ACTIVITIES

Campus Outreach Christian Fellowship

Fall 2023 - Present

- Active member
- Serving on Student Leadership for 2024-2025

Digital Monkey Piano School

Feb 2023 - Sep 2023

Belmont, CA

- Taught students ages 5-10 basic keyboard skills
- Introduced theory and ear training

Youth Volunteer

Mills Peninsula Medical Center, Burlingame, CA Jan 2020 - Dec 2022

- Served across various departments including Transportation, Hospitality, and Retail