

Natasha Wu

Berkeley, CA | natasha_wu@berkeley.edu | (510) 277-7196

EDUCATION

University of California, Berkeley
BA, Computer Science

December 2026

SKILLS

Languages: Java, Python, C, C++, ARM64 Assembly, SQL, HTML, CSS

Technologies: Qt Creator, MySQL, SQLite

PROJECTS

Baseball Stadium Tour Generator

- Collaborated within a Scrum-based team to develop a full-stack baseball stadium tour generator (11000+ lines of code).
- Utilized Dijkstra's algorithm and recursion to dynamically determine the best tour route on a case-by-case basis, enhancing fan experiences.
- Utilized GUI tool Qt Creator in creating an intuitive user interface.
- Incorporated SQLite for efficient data storage and retrieval in the project's backend.

Linked List Implementation in ARM64 Assembly

- Collaborated with another programmer to develop a robust linked list implementation using ARM64 assembly (6000+ lines of code).
- Designed functions to dynamically read, store, and manage strings from a text file into a linked list, supporting manual node insertion, deletion, search, and printing.
- Integrated memory allocation tracking to display system resources used for the linked list.
- Enabled rewriting of the original text file with updated nodes from the linked list for persistent data storage.

Discord Bot

- Designed and implemented a Discord bot using Python, leveraging the discord.py library, to enable user interactions and admin functionalities.
- Programmed the bot to respond to user commands, enhancing user engagement by providing text responses and image attachments.
- Empowered the bot with admin capabilities, including user management features like kicking, muting, and banning users, contributing to better server moderation.
- Enhanced the user experience by configuring the bot to welcome new members to the Discord server and announce departures, fostering a sense of community.

WORK EXPERIENCE

Math Tutor

Irvine Valley College

Irvine, CA

January 2023 – March 2024

- Provided comprehensive tutoring support in College Algebra, Trigonometry, Calculus 1, Calculus 2, Calculus 3, Linear Algebra, and Differential Equations.
- Acted as a mentor to incoming tutors, offering guidance and support to help them integrate into the math center team seamlessly.
- Demonstrated a flexible teaching approach by adapting to various learning styles and preferences, ensuring a tailored educational experience for each student.
- Consistently helped students achieve better results in their math classes, contributing to their academic success and overall understanding of complex mathematical concepts.