Bryan Lin

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Education

San Jose State University – BS Computer Engineering	Expected May 2026

Honors: Deans Scholar   GPA: 3.76

Course Work: Programming Concepts & Methodology [C], Object-Oriented Concepts & Methodology, [C++], Data Structures & Algorithms [C++, Python], Software Engineering[C++, Python, SQL, React]

Skills

Languages: C, C++, Python, SQL, HTML, CSS, MASM Assembly, Verilog

Developer: Git, GitHub, MySQL, Flask, Slack, Numpy, SQLite Studio, Pandas, Vivaldo

Experience

General Laboratory Assistant, San Jose State University – San Jose, CA   Aug 2023– Present

- Mentor a class of 25 engineering students, through hands-on projects and experiments to deepen their understanding of engineering principles
- Designed and implemented a hands-on curriculum for future engineers, incorporating the use of electrical measurement tools, SolidWorks for CAD, and C/C++ for programming.
- Utilized interactive teaching methods such as group discussions and peer-to-peer learning activities to enhance student engagement and collaboration within the classroom, leading to an average satisfaction rating of 4.5 out of 5 from students on course evaluations.

Projects

Club Shopping Site (React, Python, MySQL)   July 2024 - On-Going

- Developed a shopping website to help promote the 3D printing services and Arduino/FPGAs offered by the Software & Computer Engineering Society
- Integrated with email notifications and store metrics such as print day, money spent, and amount of orders
- Enabled real-time order tracking and automated report generation to streamline purchase insights for club members and administrators.

Restaurant Ordering System Backend (C++, MySQL)   May 2023

- Led a team of three in developing a modular ordering system backend, enabling essential functions such as item addition and order processing
- Developed in C/C++ to construct a resilient and scalable system capable of accommodating numerous user modifications without lag & delay
- Utilized MySQL for database management, ensuring data consistency and optimized query performance, and reduced order processing times by 20%.

Discord Magic The Gathering Support Bot (Python, API)   Dec 2023 - Feb 2024

- Developed a Python-based Discord bot for managing user requests for Magic the Gathering Cards, such as card information, legalities, and rulings utilizing Discord API, and Scryfall API
- Efficiently responded to commands within one second, and was able to scale to mid to small-sized servers of 10-500 users
- I created this bot out of a passion for the game, I wanted to provide my friends with the ability to make better judgment calls when overseeing competitive games and tournaments

Autonomous Beacon Locator & Retrieval Robot (C++,Python, OpenCV)   Nov 2022

- Designed and implemented an algorithm in C/C++ for a robot to navigate an obstacle course and successfully retrieve two beacons, using sensor feedback for dynamic path adjustment
- Implemented computer vision techniques in Python using OpenCV to enhance beacon detection and obstacle recognition, improving navigation accuracy.

Activities

Clubs: Software & Computer Engineering Society