# **Bryan Lin**

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# Education

San Jose State University – BS Computer Engineering

Expected May 2026

GPA: 3.76

**Honors**: Deans Scholar

Clubs: Software & Computer Engineering Society, Formula SAE

Course Work: Programming Concepts & Methodology [C], Object-Oriented Concepts & Methodology, [C++], Data

Structures & Algorithms [C++, Python], Software Engineering[C++, Python, SQL]

### Experience

# General Laboratory Assistant, San Jose State University – San Jose, CA

Aug 2023-Present

- Mentor a class of 25 engineering students, explaining the theoretical and practical applications of engineering in real-world situations
- 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.
- Assist in engineering design projects, utilizing SolidWorks for wind turbine development and C/C++ for backend systems, enhancing practical skills and innovation in renewable energy solutions

### **Projects**

### **Restaurant Ordering System Backend**

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**

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 designed this bot out of a passion for the game and to allow my friends to utilize this functionality to make better judgment calls when ruling games in a competitive environment

#### **Autonomous Beacon Locator & Retrieval Robot**

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.

#### Skills

Languages: C, C++, Python, SQL, HTML, CSS

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