Brian Jia

(971) 901-8867

brian.jia04@gmail.com

EDUCATION

The Ohio State University (OSU)   Expected Graduation: May 2027

- B.S. Electrical and Computer Engineering
- Overall GPA (4.0 Scale): 3.9
- Honors Program, 3x Dean's List.

PROGRAMMING LANGUAGES

Proficient In: C/C++, C#, JavaScript, TypeScript
Familiar With: Rust, HTML5, CSS, Python, Java

SOFTWARE

Proficient In: Git, Linux, KiCAD, Fusion 360
Familiar With: Blender, Onshape, Adobe Premiere Pro

WORK EXPERIENCE

Embedded Engineer / PCB Designer – Department of Engineering Education, OSU   August 2024 – Present
Official Title: Undergraduate Teaching Assistant

- Spearheaded redesign of a robot controller central to the Honors Engineering curriculum, reducing costs by 32% ($7000) and enhancing manufacturability for large-scale (125 units) production.
- Performed electrical/PCB design and developed student-friendly robotics libraries, keeping API compatibility with last-generation controller.
- Characterized and validated design for reliability under stress in the classroom environment.
- Guide honors students in development of programming (MATLAB, C, C++) and problem-solving skills.

Audiovisual Student Technician – Ohio Union, OSU   March 2024 – Present

- Responsible for coverage of audiovisual needs in the conference spaces of the Ohio Union.
- Requires high versatility; job responsibilities include controlling lighting, video, audio mixing consoles, and performing customer support for Ohio Union clients with audiovisual needs.

ENGINEERING EXPERIENCE

Flight Software Lead Engineer – Buckeye Space Launch Initiative, OSU   January 2024 - Present

- Lead a team of 14 embedded developers responsible for flight software on a high-powered, student researched and developed rocket.
- Designing C programs for STM32 microcontrollers, leveraging FreeRTOS for multitasking and using I^2C, SPI, UART for communication.
- Creating training circuit boards to teach C and embedded programming to learner programmers.
- Redesigned https://bsli.space website with aesthetic upgrades and 8x improvement in load speed.

First Place, Main Programmer – Honors Engineering Robot Team, OSU   January 2024 – April 2024

- First place in a robotics competition between ~180 first-year engineering students.
- Wrote C++ robot control algorithms for NXP ARM Cortex-M4 microcontroller, using interrupts for quadrature decoding and PID/feedforward control.
- In a team of 4, additionally performed duties in documentation, CAD, and project management.
- Used CMake build system to make robot program more extensible