

Brian Hou

[LinkedIn](#)

[Personal Website](#)

Brianhou818@gmail.com

Mobile: (510) 850-7996

OBJECTIVE

Seeking a dynamic internship position as a mechanical/mechatronics engineer, specializing in designing, analyzing, and building mechanical equipment focused on automation

EDUCATION

Robotics Engineering, BSE

Arizona State University Ira A. Fulton School of Engineering

Sophomore, 2022-2026 (Expected)

Cumulative GPA: 4.0

WORK EXPERIENCE

Robotics Engineer (Internship)

3H. Grand Enterprise Co., LTD.

May 2023 – August 2023

- Delivery robot CAD, planning, prototyping, construction
- In charge of computer software/hardware issues of the company

Skills: Solidworks, Computer Technician, Robotics Engineering

PROJECT EXPERIENCE

Mechanical/Design Lead

May 2022 – Present

PYRO Robotics

- Mechanical head of the Rossum Rumbler and PYRO robotics team
- 3D design using SolidWorks for complex mechanisms such as PTO drivetrain
- Responsible for 2 robot designs, testing, construction, and troubleshooting
- Programming/debugging using C/C++

Skills: Mechanical Design, Solidworks, Robotics Engineering, 3D Printing, C++

Custom Macro Keypad

May 2022 – May 2023

Personal Project

- 6-key keypad designed using Solidworks, Arduino Pro Micro, custom PCB
- A YouTube streamer uses it daily as a macro pad for better stream quality and ease of life
- Sold out in the span of 2 weeks
- Reprogrammable to any desired key using the Arduino IDE

Skills: Solidworks, Embedded Systems, PCB Design, 3D Printing, Arduino, C++

Team Founder & Mechanical/Design Lead

June 2019 – May 2022, Taiwan

VEX Robotics Varsity in KCIS (High School)

- Won the National Champion of Taiwan for two years
- Led the varsity team to win awards in various national and international competitions
- Successfully promoted VEX as one of the most popular clubs in the school
- Founded a VEX Discord group and answered members' questions.
- Continued to mentor newcomers after graduation

Skills: Leadership, Mentoring, Mechanical Design, Solidworks, Robotics Engineering, C++

SKILLS

- 3D Mechanical Computer-Aided Design: Solidworks, Fusion, OpenSCAD
- Mechanical Technologies/Construction: Working knowledge with machinery and hand tools
- Programming languages (C/C++, Java, Python, Arduino, HTML & CSS)

CERTIFICATIONS

- Titans of CNC Titan 1-6M CAD Solidworks Certification
- Certified in Emergency First Response (P.A.D.I. 2022)