# **Brian Hou**

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### **OBJECTIVE**

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

### **EDUCATION**

## **Robotics Engineering, BSE**

Sophomore

Arizona State University (ASU)

Cumulative GPA: 4.0

#### **EXPERIENCE**

## **Head of Mechanical Design**

August 2022 – Present

ASU VEX Robotics Varsity

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

## **World Championship Expedition Crew**

May 2022 – Present

ASU PYRO Robotics, Rossum Rumblers Robotics

- Won the world's highest award for robot construction, 3<sup>rd</sup> consecutive year
- Built the most discussed robot at the championship event, and awarded an interview on the main stage.
- Became one of the three most important members of the team within the 1<sup>st</sup> year on joining

## 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**

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

#### PERSONAL INTEREST

- Swimming
- Photography
- Certified in Emergency First Response (P.A.D.I. 2022)