# **Aaron Huang**

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#### **EDUCATION**

Olin College of Engineering | Bachelor of Science in Mechanical Engineering

Recipient of 50% Tuition Merit Scholarship (\$100,000)

North Quincy High School

Avers-Shields Science Scholarship (\$2,500)

Expected May 2024

4.00 GPA

June 2020

4.39 GPA

### **EXPERIENCE**

#### BAJA SAE: Build an off-road vehicle for spring competition

2020 - Present

Olin College of Engineering | Needham, MA

- Drive Train Member & Co-Lead (2021): Build an off-road vehicle for competition
  - o Manage sub-team with two other co-leads
  - Work with components that deliver power to the driving wheels such as the half-shafts, intermediate, and input shafts for the gearbox
  - o Creating CAD models, drawings and designing for four-wheel drive (differentials, gearbox layout)

Rocketry Club: Build a rocket for competition and launch to an apogee of 10,000 ft

2020 - Present

Olin College of Engineering | Needham, MA

- Propulsion Member: 2020-2021
  - o Burn and Apogee Simulations for model rockets
  - o CAD Modeling, Drawings, and FEA in Fusion 360: engine casing, bulkhead, and nozzle cap
- Engine Project Manager: 2021-Present
  - o Multi-year project to create and test model rocket engines
    - Test Stand: finalized CAD model and drilled and welded test stand

Summer Construction Work: General construction/demolition work

Summer 2021

Huang MJ Construction | Quincy, MA

- Gutted 5 story building, removing a section of the floor beams from the basement to the 5th floor
- Operated Bobcat E26 Excavator and S550 Skid-Steer Loader to dig and pour 2 garage footings, pads, and putting up wood framing and roof

Science Fair Projects: Conducted science experiments for competition

2017-2020

North Quincy High School | Quincy, MA

- 2017 Strength of Magnetic field in Acids and Bases; Tested the interaction between ion concentration and a magnetic field
  - o Regional Honorable Mention and Edward Ramsden Award
- 2019 Core Vertex Angle and Magnetic Flux in Terms of Newtons; Tested correlation between vertex angle of a core and density of its magnetic field

Engineering Club: Worked on engineering related projects

2016-2020

North Quincy High School | Quincy, MA

- Board Member: Collaborations in projects, such as egg drops, rubber-band cars, vex robots; meet once a week
- Crane Robot Project: In collaboration with one other, built a remote-controlled crane vehicle using vex parts and programed in ROBOTC

## **SKILLS**

Software: Python 3, MATLAB, Arduino, Markdown, Blender

Mechanical: FDM 3D Printing, SolidWorks 2019, Fusion 360, Soldering, Construction Equipment (Table Saw, Angle Grinder, Compound Single Bevel Saw, Reciprocating Saw, Nail Gun), Laser Cutter, Belt/Disc Sander, Sand Blaster, MIG Welding, Vertical Band Saw, Drill Press, Lathe, Mill, CNC Mill

Other: GitHub, Photoshop, Illustrator, PrusaSlicer, Cura, Mandarin, Latin