

Jacob Chiu

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2025-12-29

EDUCATION

Henry M. Gunn High School

GPA (UW) 4.0/4.0; SAT 1580/1600; PSAT 1520/1520

Palo Alto, CA

Aug 2022 – Present

- **Relevant Coursework:** Chemistry H (self-studied AP Chemistry, 5), AP Spanish (5), self-studied AP US Government (5), AP Computer Science A (5), AP Physics C (5/5), Principles of Engineering and Robotics PLTW, AP Calculus BC (5), AP Statistics (IP), Digital Electronics PLTW
- **Extracurricular Activities:** Card Game Club President
- **Awards:** World Language Award (AP Spanish, 2024)

Irvine Valley College

GPA 4.0/4.0

Irvine, CA

Jul 2022 – Present

- **Relevant Coursework:** Engineering Graphics and Descriptive Geometry, Intro to Engineering and Technology, Computer-Aided Design Techniques, Intro to Psychology, Mass Media and Society, Intro to Computer Systems, Intro to Environmental Science, Unix and Linux (IP)

Additional Coursework

- **BYUIS:** Small Engine Repair
- **Coursera:** Programming for Everybody (Getting Started with Python), Python Data Structures, Using Python to Access Web Data

EXTRACURRICULARS

Synopsys Science Fair

Competitor

San Jose, CA

Jan 2023 – Mar 2025

- 2025: [Controlled-Atmosphere Device for Rapidly Drying Clay](#)
- 2024: [Compact Ferrofluid Pump for Laptop Liquid Cooling to Improve Cooling Performance Over Heat Pipes](#)
 - **Awards:** IEEE Award, Office of Naval Research Award
- 2023: [Water Boiling Device with Heat Exchanger-Based Preheating to Produce Potable Water with Increased Energy Efficiency](#)
 - **Awards:** Bruce Kawanami Award, Honorable Mention

Repair Café/Fixit Clinic

Volunteer Fixer (assist people in fixing broken items)

San Francisco Bay Area, CA

Aug 2023 – Present

- Have fixed coffee machines, toaster, sewing machines, VCR, etc. Read about it [here](#).

2024 COSMOS: Engineering Design and Control of Kinetic Sculptures

San Diego, CA

2023 Michigan Math and Science Scholars: Sustainable Polymers

Ann Arbor, MI

Gunn Robotics Team (FIRST Robotics Competition Team 192)

Drivetrain Sub-Group

Palo Alto, CA

Aug 2024 – Present

- Worked with other students to design, draft, and construct a pivot mechanism for a FIRST Robotics Competition robot
- Machine precise ($\pm 0.001''$) parts for a custom swerve (omnidirectional) drivetrain, using the lathe and vertical mill.
- Worked 203 hours beyond school hours over 12 weeks in 2025 competition season

Summer 2025 Mercedes Doctor Internship

Mountain View, CA

ADDITIONAL

- **Programming:** Java (Intermediate), Python (Intermediate), Arduino (based on C++, Intermediate), Scheme (Novice)
- **Handy skills:** Electronics and torch soldering, basic hand tool operations (filing, sawing, etc.), drilling, FreeCAD, 3D printing, [AutoCAD certified user](#), [Solidworks CAD Design Associate](#)
- **Languages:** Mandarin (Intermediate), Cantonese (Advanced/Fluent), Spanish (Intermediate)
- **Additional Projects:** See my website: jacobchiu.com
 - Gedit (text editor) word counter, custom alarm clock, zinc casting, typewriter restoration, etc.