

Christopher Lam

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Education

University of British Columbia – Vancouver, Canada

B.A.Sc., Engineering (Engineering Physics focus) | Sept 2025 – Present

Relevant Coursework:

- **APSC 100** (Engineering Design), **APSC 160** (Programming & Computation in Engineering), **PHYS 157** (Thermodynamics, Oscillations & Waves), **PHYS 158** (Electricity, Magnetism & Optics), **PHYS 159** (Experimental Physics Lab – Measurement & Analysis)

Foothill High School – Pleasanton, CA

High School Diploma, GPA: 4.25 | Aug 2021 – May 2025

Relevant Coursework:

- **AP Physics C: Mechanics & E&M** (calculus-based mechanics, electricity, magnetism);
 - **PLTW Digital Electronics** (logic circuits, Boolean algebra, breadboarding, soldering, Multisim simulation);
 - **PLTW Computer Integrated Manufacturing** (CAD/CAM, CNC machining, manufacturing processes);
 - **PLTW Principles of Engineering** (mechanics, materials, energy systems)
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Independent Engineering Projects

- **Custom LED Desk Lamp** – Built a spring-balanced lamp and analog LED driver, integrating mechanical design with circuit engineering.
 - **COVID-19 Emergency PPE Production** – Produced and distributed 3,500+ 3D-printed face shields; recognized by NorCal Ambulance.
 - **3D Printing & Fabrication** – Assembled and calibrated a large-format 3D printer; designed and prototyped functional CAD models.
 - **Mousetrap Car (1st Place)** – Applied torque and friction optimization to engineer a top-performing mousetrap-powered vehicle.
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Work Experience

In-N-Out Burger – Pleasanton, CA | *Store Associate* | 2022 – 2025 (Temporary Leave)

- Delivered high-quality service in a fast-paced environment while maintaining precision under pressure
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Leadership & Activities

Scouts BSA Troop 941 – Pleasanton, CA | *Senior Patrol Leader, Eagle Scout*

- Elected leader of a **100-member troop**, directing weekly meetings, multi-day outings, and training.
 - **Eagle Scout Project:** Designed and led installation of a public bicycle repair station, managing 15+ volunteers.
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Skills

- **Engineering & Technical:** Autodesk Inventor, Fusion 360, Arduino, soldering, oscilloscope, CAD/CAM, 3D printing (FDM), CNC/laser cutting
- **Digital Electronics:** Circuit logic design, Boolean algebra, truth tables/K-maps, breadboarding, soldering, simulation, troubleshooting
- **Programming:** Python (basic), Arduino C
- **Lab/Research:** Materials testing, mechanical load experiments, prototyping workflows
- **Interpersonal & Communication:** Team leadership, collaboration, technical communication,
- **Interests:** Hiking (Mt. Whitney, Mt. Fuji), photography, design & film