ADRIANA LEE

Burnaby, BC
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SKILLS

Hardware
- 3D Printing
- Laser Cutting
- Mechanical / Electrical / and Software Prototyping
- Breadboarding
- Soldering (Manual & Hot Air)
- Machine Tools

Software
- SolidWorks & SW PDM
- AutoCAD
- Android Studio
- Microsoft Office
- Adobe Illustrator & Photoshop
- Bluebeam Revu
- Revizto
- Revit

Coding
- C++
- Java Script
- Java
- Python
- MATLAB
- HTML

Languages
- English - Professionally Fluent
- Spanish - Fluent

WORK EXPERIENCE

PowerTech Labs - BC Hydro — *Surrey, BC*
Manufacturing Co op Student — Sept. 2024 - Dec. 2024
CADD Technician — Jan. 2025 - Aug. 2025

- Designed and reviewed Hydrogen fuelling station mechanical subsystems.
- Created and communicated shop drawings for manufacturing.
- Constructed the SolidWorks design library with over 500 parts for efficient hydrogen station design.
- Designed a high-pressure automated test bench and hydrogen particulate test jig for manufacturing.

Smith + Andersen — *Burnaby, BC*
Jr. Mechanical Designer — Jan. 2023 - Sept.2023

- Designed and reviewed numerous mechanical drawings in Revit, Bluebeam, and Revizto.
- Revised the HVAC, fire protection, water/IV, and storm drainage systems in the New St. Paul's Hospital Project.
- Communicated and resolved design issues with team members.
- Utilized Excel and Bluebeam to calculate storm load and fixture pricing.
- Communicated with partnered firms and client for Furring and Chasing Requests.

TECHNICAL PROJECTS

Electric Braille Tablet — Mar. 2024
Team Lead - Competition Submission — SFU Applied Science

- Organized and led a team of 3 over the course of a month to ideate and prototype our product.
- Used 3D printing, electromagnetic coils, and a machine learning algorithm to create a braille cell that can display a character that was written on screen.
- Successfully won both the Audience Choice Award and the Top Prize.

Electric Race Car Frame Jig — Jan. 2023 - Aug. 2025
Project Lead — Team Phantom

- Designed an effective system to brace frame tubing to be welded at precise angles.
- Used SolidWorks to model the full system.
- Manufactured the jig using laser cutting and 3D printing.

Microcontroller-Based Fan — Dec. 2023
Collaborative Project — SFU MSE

- Created a 8051 microcontroller-based project to control a fan and display the real RPM.
- Used programming language C to create a feedback control which self-corrects speed.

MEMBERSHIPS & CLUBS

Team Phantom Frame and Aero Team — Nov. 2021 - Aug. 2025

- Designed integral parts of an electric car to improve on current models.
- Improved mechanical designs by performing simulated stress analysis.
- Researched material selection to improve cost, eco-footprint, and performance.
- Performed 3D modelling, 3D printing, and Llaser cutting to help design and manufacture the frame..

Mechatronic Systems Student Society — Nov. 2020 - June 2025

- Held various leadership roles including VP Academics, VP Services, and VP Professional Relations.
- Was a liaison between students and faculty, contributing student perspective to institutional changes.
- Created sponsor relations, resulting in tens of thousands of dollars towards student functions.
- Organized and attended large-scale nationwide events as a representative of SFU.

CONFERENCES & PROFESSIONAL DEVELOPMENT

SFU Basics of Machine Tools — Aug. 2024

- Completed an intensive 4-day course involving hands-on experience with precision machining and measuring
- Learned to use bandsaws, mills, lathes, drills, metal sheet cutters and benders to make precise pieces.

SFU Agritech BootCamp — Apr. 2024

- Completed an intensive 6-day course revolving around the use of robotics and machine learning in agriculture.
- Presented my work on Machine Learning in Agriculture.

Conference for Sustainable Engineering — Feb. 2021 & Feb. 2024

- Participated in lectures and workshops revolving around sustainable practices in engineering currently being implemented, mainly in the construction industry.
- Attended workshops to build on leadership and communication skills.
- Learned about the key building requirements as conveyed by ASHRAE.

HONOURS & AWARDS

Dean's Honour Roll — Aug. 2025

- Awarded for maintaining a TGPA above 3.5

MSE Equity, Diversity, and Inclusion Champion Award — Sept. 2023 & 2024

- Awarded for promoting diversity and inclusion within the community

SFU Inspiring Women in Applied Science Award — Sept. 2023

- Awarded for maintaining a high GPA while pursuing prominent positions within the community.

MSE Leadership Award — Sept. 2023

- Awarded for exuding strong characteristics of leadership within the community

Canada Company Bursary — Aug. 2021

- Awarded for great leadership and teamwork within the National Cadet Advisory Committee.

EDUCATION

BASc: Mechatronic Systems Engineering — Sept. 2020 - Aug. 2025

- *Simon Fraser University Surrey*

INTERESTS

Camping, Mechanical Keyboard Building, Electric Longboarding, Retro Electronics