

Oliver Izen

Mechanical Engineering | osizen@icloud.com | 604-368-3167 | Portfolio: oliverizen.ca | Vancouver, BC

TECHNICAL SKILLS

DESIGN

- Solidworks (CAD, FEA)
- Fusion 360 (CAD, FEA)
- AutoCAD

MANUFACTURING

- 3D Printing (FDM, SLA)
- Machining (Mill, Lathe)
- Design for Manufacturing

PROGRAMMING

- MATLAB/Simulink
- Arduino
- C

OTHER

- Microsoft Office 365 (Excel, PowerPoint)
- Google Workspace

EDUCATION

University of British Columbia

Expected May 2029

Degree: BASC - Mechanical Engineering - 2nd Year (Pre-acceptance into mechatronics)

Co-op: Available for 4 or 8 months beginning in May 2026

Grade Avg: 86.7%

DESIGN TEAM EXPERIENCE

Formula UBC SAE Racing Team, Vancouver, BC

September 2025 – Present

Suspension Subteam Member

- Coordinated with members & subteams to design packaging of front and rear shock systems
- Simulated & optimized bellcrank geometry using principles of solid mechanics and Solidworks FEA
- Hands-on work fabricating parts and assembling suspension systems

WORK EXPERIENCE

Pedalheads, Vancouver, BC

July 2023 – August 2024

Instructor

- Led engaging & structured bike lessons for children, helping develop confidence and cycling skills
- Engaged with parents, children, and team members to foster a supportive learning environment
- Adapted teaching strategies to accommodate different learning styles and skill levels

TECHNICAL PROJECTS

Nintendo Switch 2 Travel Case, Personal Project

June 2025 – August 2025

- Designed & manufactured a 3D printed hardshell travel case for a Nintendo Switch 2 balancing form and function
- Navigated numerous manufacturing challenges through online research, physical testing, and consultation with manufacturing engineers from JLC3DP
- Utilized rapid prototyping and advanced CAD techniques to create an efficient workflow

Lunar Additive Base (LAB), Autodesk Design Competition

April 2024 – July 2024

- Awarded first prize for designing a 3D printed lunar habitat for the Autodesk Make it Resilient Design Competition
- Followed a manufacturing focused design philosophy to create a lunar habitat optimized for sustaining human life while remaining simple to build using lunar materials and modern robotics
- Incorporated elements of current research and future mission plans from the ESA and NASA into project



THE UNIVERSITY OF BRITISH COLUMBIA

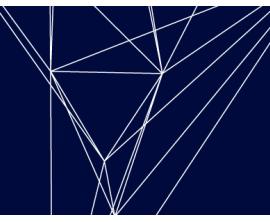
Co-op Program

Faculty of Applied Science

COOP.APSC.UBC.CA

604-822-3022

apsc.coop@ubc.ca



Automotive Design in CAD, Personal Project**August 2020 – Present**

- Created a portfolio of over 40 unique automotive designs in CAD inspired by real cars and technological innovations
- Developed skills in various CAD softwares including Solidworks, Fusion 360, and Shapr3D

Electric Motor Car, Physics 12 Project**May 2024 – June 2024**

- Designed and manufactured a small car powered by custom built brushed DC motor
- Applied principles of electricity and magnetism to maximize motor performance
- Optimized mechanical design to reduce weight and material usage while retaining strength and stiffness

VOLUNTEER EXPERIENCE**West River Karate, Vancouver, BC****September 2016 – July 2023****Assistant Instructor**

- Taught and assisted training classes of all ages
- Developed and practiced communication and leadership skills
- Devoted 400+ hours of teaching time

The Griffins' Nest, Vancouver, BC**April 2021– June 2024****Student Journalist**

- Contributed to the paper writing news and analysis articles on local and global affairs as well as opinion pieces reviewing film and music
- Learned and applied fundamentals of journalism to write effective pieces
- Engaged students and community members to distribute printed newspapers

AWARDS**2025** UBC Dean's List**2025** UBC Writing and Research in the Disciplines Student Conference Speaker
*Opportunity presented to top 30 WRDS 150 Students for exemplary research work***2024** First Prize + Scholarship - Autodesk Make it Resilient Design Competition**2024** BC Academic Achievement Scholarship**2022** Gold - Karate Canada National Championships,
*St. John's, NL ·National Champion in Cadet 70+ kg Kumite and member of Team Canada***2022** Bronze - Commonwealth Karate Championships, Birmingham, UK**INTERESTS & ACTIVITIES****KARATE:** Training 14 years. Competed internationally as a member Team BC and Team Canada**CYCLING:** A way for me to stay active and explore new places. I also love the engineering of bikes.**AVID READER:** Particular interest in sci-fi and fantasy genres