

# Jonathan Loewen

Mechanical Engineer in Training in Kelowna, BC  
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## LINKS

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## SKILLS

### SOFTWARE

AutoCAD • MS Office • YorkPsychometric Software • Python • Matlab

### GENERAL

Class 5 BC Drivers License • Leadership • Interpersonal Skills • Detail Oriented • Time Management

### HARDWARE

• Ultrasonic Thickness Meter • Flow Meter

## EDUCATION

### UBC OKANAGAN

BASC. MECHANICAL  
ENGINEERING

09/2018 – 04/2022 | Kelowna, BC

### KPU

FIRST YEAR ENGINEERING

09/2017 – 04/2018 | Surrey, BC

## COURSEWORK

### EXTRACURRICULAR

UBCO Aerospace Club  
UBCO CFD Lab

### UNDERGRADUATE

Fluid Mechanics 2  
HVAC  
Heat and Mass Transfer  
Project Management  
Technical Writing

## HOBBIES

Computational Fluid Dynamics  
Machine Learning  
Music  
Learning New Software  
3D Printing

## WORK EXPERIENCE

### SMITH + ANDERSEN | MECHANICAL ENGINEERING DESIGNER

06/2023 – Current | Kelowna, BC

- Used AutoCAD to provide cohesive drawings for multiple construction projects.
- Produced design spreadsheets and tools to improve design efficiency.
- Complied with various codes and standards to produce quality engineering designs.
- Coordinated with suppliers and other contractors to provide cohesive designs.

### LANTIC INC. | MECHANICAL ENGINEERING COOP STUDENT

01/2020 – 12/2020 | Vancouver, BC

- Managed and planned contractor work on site for 2 independent projects.
- Produced AutoCAD sketches for project proposals and quotes.
- Learned about and used various piping and other design standards.
- Wrote documents such as funding requests, project completion memos, and technical reports.
- Completed pump sizing calculations which I used to get a supplier's quote.

### UBCO CFD LAB | UNDERGRADUATE RESEARCH ASSISTANT

09/2019 – 12/2019 | Kelowna, BC

- Learned advanced CFD topics for analyzing fluid flow in small (capillary) tubes.
- Analyzed simulation and looked for anomalies to present in a weekly meeting.
- Automated workflow in python to more efficiently use time.

## TECHNICAL PROJECTS

### HEATING AND COOLING LOAD DESIGN | HVAC PROJECT

01/2022 – 04/2022 | UBC Okanagan

- Established reasonable design assumptions.
- Calculated and reported on results.
- Worked with teammates to ensure consistency in calculations.
- Calculations based on ASHRAE 2009 standard.

### EXPERIMENTAL LIQUID ROCKET ENGINE | CAPSTONE PROJECT

09/2021 – 04/2022 | UBC Okanagan

- Led a team of 5 students to evaluate applicability of a liquid rocket engine for competition use.
- Handled receiving quotes and interfacing with the school.
- Determined important combustion values.
- Assisted with heat transfer calculations.

### SELF LANDING MODEL ROCKET | UBCO AEROSPACE CLUB

01/2019 – 12/2019 | UBC Okanagan

- Managed 3 subteams with 8+ students combined.
- Interfaced between executives and subteams to show progress, set goals, and explain needs.