

# Nathan Underhill

## Bachelor of Mechanical Engineering

Sept. 2022 – Apr. 2026 (Expected)

University of Victoria – Victoria, BC

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🌐 <https://nunderhill.ca/>

🌐 [LinkedIn](#)

## Skills

Communication, Problem Solving,  
Leadership, Work Ethic

3D CAD, 3D Printing, Soldering, Technical  
Reports, Computer Programming

## Applications/Languages

SolidWorks, Microsoft Office and Excel, G  
Suite, MATLAB, Arduino IDE, Java, C,  
HTML/CSS, JavaScript, Python,  
PrusaSlicer

## Teams/Volunteering

### Mechanical Team Member • UVIC Renewable Energy Club – Carbon Capture Division

*June 2023 – Present*

- Currently working on mechanical components of blast gate system.

### Captain/Manager – UVIC Intramural Basketball Team

*2021 – 2023*

- Managed schedule for games and practices.

### Youth Baseball Instructor • Parksville Royals Baseball Club

*2017 – 2020*

- Instructed kids age 12 and under at local baseball camps.

### Exhibitor Assistant – UVIC High Tech Career Fair 2023

*February 2023*

- Assisted employers and staff with setting up booths.

## References

### Paul Johnson

Employer – Owner of Rock-Solid Countertops  
[Paul@rock-solid-countertops.ca](mailto:Paul@rock-solid-countertops.ca)

### Carter Hancock

Employer - Franchise of Student Works Painting  
[Carterbhancock@gmail.com](mailto:Carterbhancock@gmail.com)

### Ian Sandercock

Supervisor – Operations Support at Ocean  
Networks Canada  
[iansandercock@oceannetworks.ca](mailto:iansandercock@oceannetworks.ca)

## Projects

### Autonomous Pathfinder Vehicle

- Designed 3-wheel autonomous vehicle which operates using an Arduino, Motor controller, and Ultrasonic sensor.
- Wired and soldered all connections between electronic components.
- Programmed algorithm in Arduino IDE where vehicle scans area with ultrasonic sensor and determines optimal path to follow.

### Vex Kit Autonomous Robot

- Collaborated within a team of three to design and assemble an autonomous robot using a Vex kit, capable of locating and accurately placing an object onto a designated target.
- Engineered a sensor system using Infrared and Ultrasonic sensors, and programmed a search algorithm using RobotC, leveraging sensor data for autonomous navigation.
- Achieved a grade of 100% for final demonstration.

## Work Experience

### Ocean Networks Canada • Operations Support Specialist CO-OP

*May 2023 – August 2023*

- Improved accuracy of instrument testing by designing and 3D printing mounts for circulation pumps used in our instrument test tank.
- Used MATLAB to analyze and predict effect of ocean current drag on underwater moorings for more accurate recovery procedures.
- Conducted a material analysis on biodegradable plastics, resulting in the replacement of ONC's conventional deep-sea object securing method with a sourced biodegradable alternative.
- Worked on optimizing inventory system using Google Sheets and Apps Script.
- Managed logistic processes such as shipping/receiving and inventory management to allow for efficient project executions.

### Student Works Painting • Crew Lead

*May 2023 – August 2023*

- Monitored supplies and orders of work related materials.
- Supervised crewmates in a painting crew of 3 people.
- Worked over 130% efficiency based off standard piecework regulations.
- Managed customer relationships and maintained 100% customer satisfaction.