# Caleb Mueller

Cochrane, AB | (778) 266-6601 | ctwmueller@gmail.com | cmueller.ca

## **EDUCATION**

## **BASc Environmental Engineering**

Prince George, BC

University of Northern British Columbia

September 2020 – May 2025

- Accredited P.Eng. program with a focus on energy, hydrology, lab testing, and project management
- Aided in the development of 3D printing capacity and educated engineering students in CAD design
- Participated in and conducted engineering research projects related to climate change and hydrology

#### **CERTIFICATIONS**

SolidWorks CAD Design Professional

• IBM Data Science Specialization

ID: C-Z86YEG5TLA

ID: 7KUJ2G6G6EJL

#### **EXPERIENCE**

# **CAD Teaching Assistant**

Prince George, BC

University of Northern British Columbia

January 2025 - Present

- Teach graduate and undergraduate students 3D modeling for their research projects using CAD software
- Conduct CAD workshops and provide personalized support in techniques and applications

#### Field Research Assistant

Prince George, BC

University of Northern British Columbia

November 2024 – February 2025

• Conducted hydrology field work with a PHD student in Fort St. James

#### Environmental Data Analyst - Student Researcher

Prince George, BC

University of Northern British Columbia

Ianuary 2024 - August 2024

- 3D modeling and thermal simulation of artificial bat roosts in SimScale (January April)
- Researched the impact of climate change on water balance in agricultural watersheds in BC (April August)
- Processing of historical and projected climate data using Excel, Python, R-Studio, and ArcGIS Pro

#### **Administrative Assistant**

Prince George, BC

University of Northern British Columbia

*June 2024 – December 2024* 

- Created an Excel database for historical newspaper articles from UNBC's Northern BC Archives
- Digitized bank and tax documents

Owner
First Form

Prince George, BC

First Form

July 2023 - Present

- Development of complex assemblies for engineering projects in SolidWorks and Autodesk Fusion
- Sale of 3D printed items to promote the use of environmentally friendly products (e.g. self-draining bar soap holders)

#### **Administrative Assistant**

Calgary, AB

Canada Revenue Agency

Summer 2021 | Summer 2022

- Prepared tax correspondence and notices for mailing to taxpayers, reset and troubleshooted call agent's phones
- Entered employee schedules, leave, and vacation balances in a proprietary database, prepared Excel reports

## **TECHNICAL SKILLS**

- CAD/Simulation Software: SolidWorks, Fusion, HEC-RAS, EPANET, DWSIM, ArcGIS, SimScale
- Data Analysis: Python, Excel, R
- Operation/maintenance of FDM 3D printers
- Scientific field work protocols

#### VOLUNTEERING

# Prototype Developer/Technician

Prince George, BC

Spark Lab

January 2024 – Present

- Engaged with researchers to understand their needs and challenges in laboratory/field environments
- Designed customized research solutions using CAD and 3D printing
- Management of a 3D printing queue, ensuring models were print-ready, and edited for printability
- Repair and maintenance of three fused deposition modeling (FDM) 3D printers
- Engaged with community members to solve everyday problems using technically advanced solutions

#### Technician/Teacher

Prince George, BC

UNBC School of Engineering

July 2024 – February 2024

- Maintenance and operation of FDM 3D printers
- Educated engineering students on 3D modeling and printing

## Over the Edge Student Newspaper

Prince George, BC

Content Writer

July 2024 – December 2024

## **AWARDS**

#### NSERC Undergraduate Student Research Award

May 2024

Natural Sciences and Engineering Research Council of Canada

• Natural Sciences and Engineering Research Council of Canada Undergraduate Student Research Award, awarded for outstanding research contributions in the natural sciences and engineering fields. The award recognizes exceptional research skills, creativity, and potential for future contributions to the field.

# Undergraduate Research Experience Award

January 2024

University of Northern British Columbia

• The Undergraduate Research Experience (URE) Award at UNBC is a competitive program designed to involve undergraduate students in scholarly research. Recipients collaborate with faculty on research projects, developing critical thinking, inquiry, and research skills.

# **MEDIA LINKS**

- Spark Lab CKPG Feature (video time: 13:10)
   <a href="https://ckpgtoday.ca/2024/06/24/ckpg-today-for-june-24-2024/">https://ckpgtoday.ca/2024/06/24/ckpg-today-for-june-24-2024/</a>
- Prince George Public Library Repair Café
   <a href="https://www.princegeorgecitizen.com/local-news/eco-living-community-holds-a-repair-cafe-at-prince-george-public-library-for-small-appliances-and-textiles-satuday-9338448">https://www.princegeorgecitizen.com/local-news/eco-living-community-holds-a-repair-cafe-at-prince-george-public-library-for-small-appliances-and-textiles-satuday-9338448</a>