Liam Bennett

M.Sc. Civil & Environmental Engineering B.Sc. Mechanical Engineering

	Email:	
Address:		

Phone:

Education

M.Sc. in Mining Engineering, 2021 -2023

B.Sc. in Mechanical Engineering Coop, With Distinction, 2017 - 2021

Technology

Fluent in Microsoft Office Suite, including Excel PowerQuery

Programming experience in Python, MatLab, Excel VBA related to data processing and machine learning

GIS experience in QGIS

3D modeling and drawing experience in SolidWorks

Certifications

Level A CPR/AED First Aid Certified

Class 5 license with clean abstract

CCIL Certified Concrete Technician

CSTS

Experience

Research Assistant

University of Alberta, Edmonton, AB September – December 2020

- Applied machine learning algorithms for image processing, including object detection and classification
- Co-authored paper on the use of machine learning to detect and classify trees in drone-collected aerial imagery
- Programmed various data augmentation and processing algorithms related to the project

Pipeline Integrity Engineering Co-op Student Enbridge Pipelines Inc., Edmonton, AB May – December 2019

 Drafted, edited, and finalized procedures and guidelines relating to protocols for assessing and responding to threatened assets

- Developed drawings and visualized data using GIS software such as ArcGIS Pro and QGIS, including writing own plugin using Python
- Generated models and drawings of assets and surrounding areas
 in AutoCAD and Civil 3D, using existing elevation and LiDAR data
- Lead department's revamp of financial forecasting by consulting with vendors, automating tasks with Python, and creating tools in Excel and PowerBI to enhance data visualization
- Created automated calculation sheet for calculating stress in a pipeline induced by blasting related ground movement
- Gathered and analyzed location data of thousands of dig sites to contribute to conference paper

Materials Technician

Wood PLC, Thompson, MB

May - December 2018

- Sampled and tested concrete and soil samples on-site of the Keeyask Generation Facility project, a 695-MW dam
- Conducted and documented routine laboratory equipment maintenance and calibration
- Gained field experience on a dynamic, safety-oriented project site