Alexi Morin

B.Eng. candidate

Studies

Geological engineering (with honors)   Since 2018
Université Laval, Québec

- Followed three graduate level courses

Skills

- Proficient with python, Matlab, C# and VBA

- Experienced with machine learning methods and tools (pyMC, scikit-learn, pytorch)

- Skilled with GIS software and libraries (ArcGIS, QGIS, rasterio, geopandas, shapely)

- Bilingual (French and English), intermediate Spanish

- Quick learner and team player, favors a mathematical approach for solving problems

Geoscience experiences

Research assistant in glaciology and geophysics   Summer 2020
Simon Fraser University, Vancouver

- Geographical and geophysical data analysis with python
- Use of Bayesian statistics and machine learning to model glacier bed topography

Research assistant in hydrogeology and geotechnical engineering   Fall 2019
Université Laval, Québec

- Data analysis, statistical methods and database management with python
- Planning and carrying out lab work to characterize properties of cement-bentonite grouting

Rock mechanics intern   Summer 2019
Ministère des transports, Québec

- Project planning a technological transfer and creation of tools for managing the database of rock cuts
- Structural geology analysis of rock massifs and use of appropriate tools for numerical modelling
- Writing reports following fieldwork

Presentations

Bayesian inference of ice thickness: Application on a surging glacier

- North West Glaciologists   October 2020

Characterizing cement-bentonite grouting

- Ministère des Transports and Ministère de la Sécurité Publique   May 2020

Awards

Jean-Luc Chauvin scholarship, Ministère des ressources naturelles - 1000 CAD	2020
Undergraduate student research award, NSERC - 4500 CAD	2020
Suppléments aux bourses de 1er cycle, FRQNT – 1500 CAD	2020
KEGS Pioneer scholarship – 1250 CAD	2020
University Student Award, CSEG – 2000 CAD	2021