

## Education

McGill University

May 2022

Bachelor of Science: Software Engineering

Montreal, Quebec, Canada

- Minor in chemical engineering
- 3.92 GPA
- Ranked in top 25% of Faculty of Science
- McGill Dean's Honor List (Top 10%)
- James McGill Academic Excellence Scholarship for 2018-2022 school years.
- Valedictorian of Saranac High School class of 2018

## Skills

- |                   |   |
|-------------------|---|
| • Java            | • OpenGL  |
| • C/C++           | • Unity   |
| • C#              | • Docker  |
| • MATLAB          | • Markdown  |
| • Python          | • Maven   |
| • Shell scripting | • Gradle  |
| • OCAML           | • Gherkin   |
| • GLSL            | • Unix/Linux                                      |
| • Github          | • Microsoft Office suite Excel, Word, PowerPoint, |
| • Gitlab          | Publisher   |

## Software Projects & Accomplishments

- Please view portfolio link below to view completed projects
- Created a hole in the wall video game with sound using OpenGL and C++
- Wrote shaders that supported lighting (spotlight, point and directional), shadows, and texturing
- Implemented game algorithms including game AI, pathfinding and collision detection using Unity
- Recreated the board game Elfenroads with online multiplayer functionality using Unity and C#
- Created an Architectural Description (AD) for Gradle
- Tested software using JUnit and Gherkin language with Cucumber framework
- Used Maven to automate test suite
- Used MATLAB to model and solve chemical engineering problems

## Job Experience

Smart Carts Enterprises LLC

March 2015 to April 2021

Intern

Buxton, ME

- Created 2 functioning websites (www.smartcarts.com and www.infinitecedar.com.)
- Assisted in the creation of new product developments and prototypes
- Edited pictures for marketing material

- Created patent diagrams drawings for a new product patent application
- Performed time studies, process improvements and equipment installation

McGill University

March 2022 to May 2022

Undergraduate Student Course Assistant

Montreal, QC

- Hand-selected by professor to created new learning materials for chemical engineering students due top-tier academic proformance
- Worked with management and instructors to establish core skills related to job and industry
- Prepared reports, presentations and articles using Microsoft Word and PowerPoint focusing on Pressure Swing Adsorption

Enterprise Foundry LLC

April 2018 to January 2019

Process Analyst Intern

Lewiston, ME

- Using lean management principles and tools I documented, analyzed and audited various manufacturing and office processes
- Performed internal quality audits in accordance with the ISO 9001:2015 standard
- Created job breakdown sheets for use in Training Within Industry (TWI) training methods
- Created website design ([www.enterprisefoundry.com](http://www.enterprisefoundry.com))
- Produced Control Plans for manufacturing and office related processes
- Performed time studies, documented manufacturing processes and recommended improvements
- Participated in the need analysis for a constraint driven production scheduling software project
- Added improvements to the Quality Management System (QMS)

## Portfolios

- <https://j-drolet.github.io/>
- <https://www.linkedin.com/in/jack-drolet/>

## Certifications

- Certified Internal Quality Auditor - formally trained on ISO Management System and internal auditing techniques.
- Lean Manufacturing - received formal training on the Lean management philosophy and tools.

## Languages

- Bilingual: English, French