# Julia B.Grenier Software Engineering Co-op Student

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**September 2022 – May 2026** 

#### Education

**Bachelor of Software Engineering (Co-op)** 

McGill University, Montreal, QC

DEC Sciences August 2020 – June 2022

Cégep de Sainte-Foy, Québec, QC

Skills

Programming Languages: Java, Python, C#, C++, HTML, CSS

**Operating Systems:** Windows, Linux

Software/Platforms: GitHub, Unity, Visual Studio Code, Google Colaboratory, IntelliJ, Bash

Communication Languages: French, English

### **Projects**

Coveo Blitz, Python Janvier 2023

Programming competition, Coveo, Québec, QC

- Coded in a team of 4 an algorithm that builds defensive structures in a "Tower Defense" game to defeat the other groups.
- Discussed with my team the different strategies to implement in the game and used Git to manage the different versions.

### All Rat Remains, jeu 2D, C#

Janvier 2023

McGameJam Hackathon, Université McGill, Montréal, QC

- Collaborated on creating a 2D game in C# incorporating mazes, puzzles, and a mysterious plot.
- Won the category "Best Audio Design".
- Efficiently managed the game's implementations using Unity and Git.

#### **API requests, Python**

November 2022 – November 2022

Foundations of Programming Course, McGill University, Montreal, QC

• Coded a python script that requests an API to transfer my virtual money to someone else.

### AI model predicting the risk of a stroke, Python

October 2022 – October 2022

CodeML Hackathon, Polytechnique de Montréal, Montréal, OC

- Programmed in a team of 4 an artificial intelligence model in Python that predicts if someone will have a stroke.
- Reached the top 5 of our ranking with the model developed.
- Train the model using classifiers from the Scikit-learn library on Google Colab to analyze 2000 data.

#### Research Paper on Fractals, Java

**January 2021 – June 2022** 

Cégep de Sainte-Foy, Québec, QC

- Programmed various fractals in Java using Processing.
- Presented in a team of 4 our research on the omnipresence of fractals during a symposium and won the audience choice category.

## Vegetarian Recipes website,

August 2021 – December 2021

Website Creation Course, Cégep de Sainte-Foy, Québec, QC

- Introduction to web fundamentals: client/server architecture, protocols (HTTP, FTP), languages (HTML, CSS).
- Created a website using WordPress that presented quick and easy vegetarian recipes.

### **Work Experience**

# Research Intern

June 2021 - April 2022

Université Laval, Québec, QC

Worked for two Ph.D. students in the CRIF Research Chair

- Designed and coded graphs to visualize the collected data with the programming language R and used the IDE RStudio.
- Followed detailed protocols and conducted chemistry experiments to improve finishing products applied to interior wood.

# **Physics tutor**

. January 2021 – June 2021

Cégep de Sainte-Foy, Québec, QC

### **Involvement**

### GameDev McGill, Game Development Club Volunteer for McGill TechFair

October 2022 – Present October 2022 – October 2022