

Ryan de Barros

ryan2004db@gmail.com • 514.914.9240

- LinkedIn: [LinkedIn Profile](#)
- GitHub: [Personal GitHub](#)

SUMMARY OF SKILLS AND QUALIFICATIONS

Operating Systems | Windows 11 • Ubuntu WSL • Windows 10

Applications | Visual Studio • PyCharm • NetBeans • VS Code • Eclipse • Neovim • Unreal Engine 5 • Blender 4
• Godot Engine 4 • Android Studio • LibreSprite • Unity

Programming | C/C++ • OpenGL/GLFW • LibIGL • Java • Python • Android • PostgreSQL • Robot Framework
• GDScript • JavaFX • C# • HTML/CSS/JavaScript (node.js)

Other | GitHub • Docker • Jira • Jenkins • SVN • CodeBerg • GitLab • REST API • Typing speed of 90 wpm

Languages | English (fluent) • French (comfortable)

Soft skills | Detail-oriented • Quick learner • Creative • Adaptable • Good communicator • Organized • Punctual

EDUCATION

Bachelor of Computer Science - Co-op Institute

2023 - August 2026 (Expected)

Concordia University, Montreal, QC

- Tier 2 Dean's List and current GPA of 3.84 (4.13/4.30)
- CS Games 2024: Participated in challenges such as *Database*, *Triathlon*, and *Gaming*.
- Relevant courses: Introduction to Game Development | Data Structures and Algorithms | Computer Graphics | Geometric Processing and Modelling | Introduction to Software Engineering.

DEC in Computer Science & Mathematics

2021 - 2023

Vanier College, Saint-Laurent, QC

- Dean's List and Honour Roll Student
- R-Score of 34
- Relevant courses: Objected Oriented Programming | Program Development in a Graphical Environment.

WORK EXPERIENCE

Product Verification Co-op

September 2024 – December 2024; May 2025 – August 2025

Ross Video, Ottawa, ON

- Developed automated tests and managed nightly runs for Ross Video's *openGear* product line (specifically *Master Control*) using *Robot Framework*, *Python*, and *Jenkins*, ensuring their quality, reliability, and efficiency.
- Built a new test automation environment for Ross Video's *softGear Streaming Gateway* product to support ongoing product verification, and contributed to its *C++ front-end development*.
- Received a recommendation from Stephane Mailloux, Senior Automation Test Developer, which is viewable on my LinkedIn profile linked at the top of this resumé.

Certified Peer Tutor

Fall 2022 - Winter 2023

Vanier College, Saint-Laurent, QC

- Regularly peer tutored other students in math and science.
- Tutored in subjects such as Calculus 1, Calculus 2, Linear Algebra, and Mechanics.

PROJECTS

Olympian Game Engine – Ongoing Personal Project

2025

- Currently writing a *low-level* game engine with *C++* and *OpenGL*, leveraging libraries like *GLM* and *GLFW*.

- Demonstrating experience in *graphics programming* through resource optimization and custom rendering/physics pipelines.

Game Development Projects

2024-2025

Applied self-taught *game development knowledge* in the following projects:

- Tides of the Horde: a 3D action survival roguelike written in *Unity* and submitted for a team project for the *Introduction to Game Development* course.
- Riseward: a 2D platformer game written in *Godot Engine 4* and submitted for GameDevTV's 2024 *Game Jam*.
- Space Raiders: a 2D spaceship shooter game written in *Godot Engine 4* and with a variety of *custom assets*.

GeoRepair – Term Project

2025

Concordia University, Montreal, QC

- Developed a mesh processing application in *LibIGL/C++* for repairing mesh defects.
- Implemented abstract theory from geometry and graphics courses, including *Laplacian deformation*, *noise smoothing*, and *triangulation*.

FitoTrack Cycling Extension – Term Group Project

2025

Concordia University, Montreal, QC

- Extended an *open-source* application using *Java* in *Android Studio* by forking its *CodeBerg* repository.
- Led a team of 6 in implementing software engineering *design patterns* and *principles*, within a larger group of 50 students working on the extension.
- Personal CodeBerg account: <https://codeberg.org/RyanDeBarros>
- Class's fork: <https://codeberg.org/COMP354Winter2025/FitoTrackCycling>

AWARDS, DISTINCTIONS, & CERTIFICATIONS

Ubisoft Game Creator's Odyssey Certificate

2025

- Successfully completed Ubisoft's official *Act 1: Rational Game Design* course.

Gina Cody Undergraduate Entrance Scholarship in ENCS

2023-2025

- A yearly renewable scholarship given to a top ranked student with an R-score above 34.

Nominated for Golden Key International Honour Society

September 2024

- An international honours organisation that offers membership to university students in the top 15%.

Gina Cody School Undergraduate Award

Fall 2023

- An award given to top ranked students in full enrollment.

Global top 25% in Pascal, Cayley, and Fermat high school math contests

2018 - 2021

- Participated in and received plaques (for first place) for four CEMC contests.

INTERESTS

Music

- Passion for creating music with software such as Guitar Pro and FL Studio.
- Plays guitar and piano, and has played in high school band for three years.

Sports

- Played soccer for 15 years.

Math/programming

- Loves learning new fields of math and developing mathematical solutions for programming.
- Loves studying new programming concepts and languages.

Puzzles

- Likes solving and making puzzles such as sudokus, word puzzles, and logic puzzles.

Miscellaneous

- Enjoys playing and developing video games.
- Enjoys reading, ranging from fiction to learning math, physics, or programming.
- Dabbled in a multitude of different hobbies for various lengths of time, such as chess, poetry, learning Japanese, and much more.