## Victor Morin

Montreal, QC (819) 448-0127 vicmo26@gmail.com

https://www.linkedin.com/in/victormorinprogrammer/

Potfolio: <a href="https://vicmo123.github.io/">https://vicmo123.github.io/</a>

French English Spanish

# Video Game Developer

#### **PROFILE**

My objective is to obtain a challenging role as a junior Unity video game programmer, where I can continue to learn and grow while contributing to the development of innovative and engaging gaming experiences. I am passionate about creating immersive and memorable games, and I am eager to work collaboratively with experienced developers to further develop my skills and gain industry experience. I am committed to working hard, learning quickly, and delivering high-quality code that meets the needs of both the team and the end user.

### **EDUCATION**

**2D-3D Video Game Programming**, AEC—Collège Universel, Montreal, 2022-2023

Cuisine and Gastronomy, DEP — Institut de Tourisme et d'Hôtellerie du Québec, Montreal, 2020-2022

Music pop-jazz guitar specialization, DEC — Cégep de Trois-Rivières, Trois-Rivières, 2017-2020

## TECHNICAL SKILLS

Programming Languages: C/C++, C#, Java, PHP, CSS3, HTML5, MySQL, MariaDB

**Graphics Programming:** SDL2, OpenGL2.1

**Engines :** Unity 2D/3D

Game Development Tools: Visual Studio, Visual Studio Code, CLion, Eclipse, Gimp

**Version Control Systems : Git** 

**Debugging and Testing:** Debugging tools, unit testing, integration testing

Artificial Intelligence: Decision-making algorithms, state machines, behaviour trees, pathfinding

algorithms, decision trees, A\* search algorithm

Collaborative skills: Jira, Trello, Discord, Teams, Bitbucket, Github

Design Patterns: Singleton, Observer, Factory, Pool, Flag, Command, Component, Flyweight, State

**Architecture :** Manager style, Top-Down, MVC, Component

Game Physics: Collision detection, rigid bodies, particle systems

Optimisations: Performance profiling, memory management, multi-threading, scalability, baking,

caching, O(n) computational complexity

Collections: Array, Array List, Dictionary, Queue, Stack, HashSet, LinkedList

**Software Development Methodologies :** Agile, Scrum

Platforms: PC, Console, VR, WebGL

## **PROJECTS**

# Maple Wars, C#, Unity:

Local multiplayer sugar shack themed game, where you have to fight against your friend to make the most syrup cans into a given time. Defend yourself against animals and your opponent using some power-ups such as trampolines, ice balls, horns and more. Developed in a team of 3 using Iterative Development, and Agile Scrum with Jira.

• Role: Split-screen, 3rd person camera, Cinemachine, Procedural terrain generation, Unity's new input system with controllers, Rag doll system, Animal system, Animal AI, State-Machine, Nav Mesh, Animations, Player movement, Footprint system, Factory-Pool pattern, Sound system, Editor tools for sound implementation, Ability system for power-ups, Top-Down architecture, Manager architecture

# Taco Truck Madness(VR), C#, Unity:

VR game where you can immerse yourself into a chaos taco truck cook, where rats will try to ruin your day. Serve the tacos in time to keep the dinosaurs happy. This project made to simulate the creation of a fully functioning prototype in a team of 3. We used agile/scrum methodology and time tracking software.

• Role: VR integration, Component based architecture, Rat and dinosaur AI, Nav Mesh, Animations, Blend-Tree, Event based sound system, Level design, Game flow

# The Last Root Standing, C#, Unity (https://trypants.itch.io/thelastrootstanding):

Global Game Jam projet at Unity Montreal offices, we designed a "root" themed game. In this fun and comedic game you incarnate a root who must defend itself against an army of lumberjacks. Developed in a multidisciplinary team of 7.

 Role: Enemy system, Enemy spawn mechanics, Enemy AI, State-Machine, Physics-based movement, collision detection, WebGL

### First Person Shooter, C++, OpenGL:

Basic FPS game made as a final project of my Graphics Libraries course. In a a city you have to defend yourself against cactuses. Developed in a team of 2.

• Top-Down architecture, Manager architecture, Singleton, First-person camera mechanics, Procedural generation of the city, UV Mapping tool, Sprite based text generation tool, Game flow, Life system, Score system, UI, Collision detection(Axis Aligned Bounding Box)

### **EXPERIENCE**

Chef de partie Garde-Manger, JellyFish Crudo et Charbon, Montreal — 2020-2021

Responsibilities: - Perform mise-en-place for the service.

- Realize dishes and execute the service.
- Apply and enforce hygiene and food safety rules.
- Train new employees.