

Samuel Lacaille-Moisan  
[saam234@gmail.com](mailto:saam234@gmail.com)  
438-933-6331

- **B.Sc. in Physics & Computer Science (GPA 3.57), University of Montreal, August 2017**
- Multiple C++ projects and C++11, C++14, C++17 knowledge
- Experience with both Unity3D and Unreal Engine 4
- Passionate about optimizations, parallelism, and functional patterns
- Fast learner and excellent problem solving skills
- Excellent communication and teamwork (french & english)

## TECHNICAL KNOWLEDGE

**Programming languages & technologies** : C++, C# , Go, Python, JavaScript, Unity3D, Unreal Engine, Angular, OpenGL, Redis, MongoDB, SQLite, Intel TBB, OpenMP  
**Operating systems** : Linux, Windows

## ACADEMIC STUDIES

**B.Sc. in Physics & Computer Science (GPA 3.57)** **2013-August 2017**  
University of Montreal

**College diploma in Nature Sciences** **2015**  
Cégep Édouard Montpetit, Longueuil

## PERSONAL PROJECTS

- Tetris automatic player (C++)** **2019**
- Using std::async for multithreading
  - Using Boost::fiber for inter-threads communication with Channels (Go-style)
  - Using decorator pattern and C++11
- First Person Shooter prototype (C#, Unity3D)** **2019**
- Heavy use of 3D vector maths
  - Automatic code generation to import game data from Google Sheets
- Mandelbrot Set Generator (C#, Unity3D)** **2019**
- Surface shader implementation for GPU acceleration
- AI distributed computing (Python, Go)** **2019**
- Using CoachRL library for the reinforcement learning
  - Using Kubernetes for the scaling
- Local multiplayer mini-game (C++)** **2017**
- Game engine implementation using polymorphism & template metaprogramming
  - Graphics & sounds using SFML library
- Breakout game with OpenGL (C++)** **2016**
- Using OpenGL for graphics and post-processing
  - Shaders implementation with GLSL

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## PROFESSIONAL EXPERIENCES

### Game Developer

**December 2017 - September 2018**

Riposte Games & Co.

- Backend development with NODE.JS, MongoDB, Redis & Kubernetes
- Game tools development with Angular, ExpressJS
- Gameplay & UI development in Unity3D with C#

### Game Developer

**August 2019 - April 2020**

Mino Games

- Game development with Haxe
- Use of functional programming patterns
- Debug mobile game with Android Studio
- Support more junior employees with code reviews