

Robin Leman

☎ +1 (438) 523-4980 ✉ robin.leman@mail.mcgill.ca 🌐 github.com/RobinLmn
in linkedin.com/in/robin-leman 🌐 robinlmn.github.io

EDUCATION

McGill University

B.S. in Physics and Computer Science

Overall GPA: 3.90/4.00

May 2022

Montreal, Canada

SKILLS

Programming Languages: C++, Java, Python, C#, C, Javascript, OCaml

Operating Systems: Linux, MacOS, Windows OS

Tools & Softwares: Unity, Unreal Engine 5, Perforce, Git, HTML, CSS, Bash

Languages: English, French (Bilingual)

WORK EXPERIENCE

The Coalition - Microsoft Xbox

Software Engineer Intern - Engine Team

May 2021 - August 2021

Vancouver, Canada

- Optimized Unreal Engine 5 through debugging tools and workflow improvements.
- Profiled new Unreal Engine 5's Chaos and Nanite technologies to measure their memory and time performances on Xbox and PC.
- Implemented physics based procedural collision volumes and Ragdoll states.

Ubisoft

Generalist Programmer Intern

June 2020 - August 2020

Montreal, Canada

- Designed a physics based buoyancy simulation algorithm in C++. Optimized it to real-time performances.
- Implemented visualization tools to improve testing and debugging workflows.

PERSONAL PROJECTS

Achilles 🐉 | 3D Physics Engine - C++

- Designed a real-time Physics Engine in an Entity-Component-System architecture.
- Implemented translational and rotational dynamics, collision detection and response, and softbody simulation for ropes and cloth.

Multithreaded Raytracer 🐉 | C++

- Designed a ray-tracing render engine from scratch in C++.
- Optimized its performance using multi-threaded concurrent programming.

Meme Popularity Predictor 🐉 | Machine Learning - Python, Tensorflow

- Designed a Convolutional Neural Network model to predict the popularity of a meme with a 65% accuracy.
- Took part in a 10 weeks machine learning "MAIS 202" bootcamp; implemented models like the Naive Bayes, PCA and SVM models.

GetOut 🐉 | Ubisoft Competition - Unity3D - C#

- Published a Puzzle 3D platformer video game in a team of 8 in 10 weeks.
- Designed and optimized 3Cs, Artificial Intelligence (State Machine) and networking for multiplayer.

VOLUNTEERING

GameDev McGill 🐉 | President (2021-Present), VP Internal (2020-2021), Member (2019-2020)

Leading a team of 10 executive members to organize events for 100+ members of a game development student association. Organizing McGame Jam, a 48h hackathon uniting 150+ hackers.

Red Cross | Volunteer (2021 - Present)

Emergency responder volunteer. Certified "Emergency First Aid CPR/AED - Level C".