# Anton Le Prevost-Smith

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#### **EDUCATION**

## **Media Design School**

July 2018 – July 2021 (Expected)

Bachelor of Software Engineering (Game Programming)

#### **TECHNICAL SKILLS**

**Programming Languages (**Ordered by proficiency**):** C++, C#, C, GLSL, Swift, JavaScript, Lua **Tools/Frameworks:** Unreal Engine, Unity, OpenGL, DirectX, Git, Visual Studio, Unreal Gameplay Ability System

#### **EXPERIENCE**

#### **Exsurgo Rehab**

December 2020 - March 2021

Contract Unity Game Developer

- Reworked an old suite of 4 android games designed for stroke rehabilitation towards a professional level in the Unity game engine. I worked as a generalist by programming new features, debugging previous problems, adding UI, prototyping or changing new/current mechanics, etc.
- Worked remote 4 weeks and in office for 8 weeks reporting progress to the CTO, as well as showcasing the games to investors to gain interest for the companies future goals and products.

# **Our Wee Little Studio**

April 2019 – March 2020

Unity Game Developer

- Co-developed Yanet in Yonderland (a 2D, puzzle, platforming game) as a Game programmer and designer.
- Tasked with programming AI behaviours and Puzzle mechanics, general script debugging, and puzzle design.
- Successfully negotiated the selling of a non-exclusive license to CoolMathGames.com and worked with them to refine the game to the standard set in the contract.
  - The game can be played online for free at: https://www.coolmathgames.com/0-yanet-in-yonderland

#### **PROJECTS**

# Game Title: Remix | University Team project | Unreal Engine, C++, Gameplay Ability System

I created an online multiplayer arena shooter game by learning the basics of networked multiplayer in Unreal using C++ and the Gameplay Ability System. I developed it to a vertical slice stage over 8 weeks within a team of 6 people (2 programmers, 4 artists).

# 2D Fluid Simulation Combat Game | Research project | Unity, C#

Developed a prototype of a 2D multiplayer combat game that uses fluid simulation as it's core game mechanic. I used a Unity plugin called Fluid Dynamics to simulate the fluid and I successfully learned how it worked so I could extend it's functionality to detect collisions with the player characters. I am currently finishing a short research paper discussing the game design and technical implementation of fluid simulation in games.

### Interactive Multi-threaded fractal generator | University/Personal project | OpenGL, C++

I created a real time interactive fractal generator that allows you to move around and zoom into the Mandelbrot fractal. The program uses multiple optimizations, one of which that I invented sped it up by an average of 95% (please ask me about this in an interview). The program can be configured to use C++ CPU Multi-threading or GPU fragment shaders using the OpenGL graphics API.

This can be seen in a video here: <a href="https://www.youtube.com/watch?v=Ofb5bC0LnsQ&t=2s">https://www.youtube.com/watch?v=Ofb5bC0LnsQ&t=2s</a>

# Project portfolio | WIP | Unreal engine 4, Unity, C++, C#, OpenGL

This is a GitHub readme page that is a portfolio of my work as a Software Engineer and Game Developer.

https://github.com/Alps709/

# **MISCELLANEOUS**

# **Extracurricular:**

- Media Design School Student Representative (Since March 2019).
- Helped co-run the MDS Music Club and occasionally brought my guitar to play.

**Passions/Interests in Computer Science:** Fluid Simulation, VR/AR, Procedural generation, Game AI, Machine learning, Graphics programming.

Passions in personal life: Playing guitar, Gaming with friends, Snowboarding.