□ 416-716-4963 | Madrianommazzucco@gmail.com | https://adrianomazzucco.github.io

Education

Sheridan College Oakville, Canada

Ontario College Graduate Certificate, Game Development: Advanced Programming

2022 - 2023

- Game engine architecture
- Implemented Entity Component system architecture in C++
- Worked with Unity engine and C# to implement Gameplay, UI and AI
- A* path-finding, Behaviour trees, Mini-Max with pruning, Finite State Machines

Toronto Metropolitan University (formally known as Ryerson University)

Toronto, Canada

2015 - 2019

BACHELOR OF ENGINEERING, COMPUTER ENGINEERING

- Advanced Algorithms, Software Architecture, Image Processing
- · Networking, Network Security
- Digital Systems Engineering, Database Systems, Embedded programming
- Linear Algebra, Calculus

Unity online

UNITY CERTIFIED ASSOCIATE PROGRAMMER Winter 2021

· Proficient in programming, UI, debugging and asset management in Unity

Work Experience _____

Gameplay Programmer Toronto, Canada

ALWAYS SNACKING STUDIOS - SHERIDAN

May 2023

- I am currently working with a team to make a RTS game for our capstone project
- The project is being made in the Unity Engine
- · I am using the Mixin design pattern to build a data-driven system to create modular gameplay features

Data Analyst Toronto, Canada

KUBRA May 2020 - August 2020

- Registered print jobs through proprietary Kubra software.
- Data validation of all registered print orders
- Made changes to code to resolve errors using C++ and visual basic

Software Engineer Toronto, Canada

RYERSON UNIVERSITY

September 2018 - April 2019

- Developed a cloud based power-flow assessment tool as my capstone project
- · Work with Ruby and JavaScript using AWS services, to perform Newton Raphson algorithm for loads, busses, and generators
- Published a technical document with IEEE https://ieeexplore.ieee.org/document/9025140

Software Engineer Toronto, Canada

• Work with startup team to develop stock processing website

September 2016 - December 2016

- Mork Mith startup team to develop stock brocessing website
- Developed JavaScript algorithms to analyse and organise data from a SQL database

Office Assistant Toronto, Canada

TORONTO CATHOLIC DISTRICT SCHOOLBOARD

STOCK RENDER

July 2012 - August 2019

- · Took student attendance, called parents of absent students
- Handled any issues that arose at the school

Physics tutor Toronto, Canada

PRIVATE TUTOR 2019-2020

• Tutored high-school physics, helped students prepare for exams

Skills

Unity Engine

- Implemented A* path-finding algorithm
- Implemented Inverse kinematics algorithm for animating 3D models
- Implemented Mini-Max algorithm for tic-tac-toe and connect four
- Created and published game for android devices

Programming Proficiency

• C, C++, C#, Java, JavaScript, Python, Lua, VHDL, Verilog, Assembly, .net, OpenGl, MonoGame, SFML, HLSL, GLSL,

Honors & Awards

	2nd Place Ubisoft Next programming competition 2023, To achieve this award I built an entity component system	
2023	Game Engine in a month. I then built a bomber-man inspired game in one weekend. For the engine I made a math	Toronto, Canada
	library to create a 3D game with a dynamic camera using the 2D graphics API provided by Ubisoft	
2019	Toronto Hydro Student award 2018/2019 , Awarded to the student group that created a web application that could	Toronto, Canada
	be used by Toronto Hydro in a real life application	
2019	Ryerson Capstone Design Project Excellence Award Gold, Awarded to best capstone project for Ryerson	Toronto, Canada
	Engineering	

Extracurricular Activities _____

- Game design and development
- Interest in computer hardware, built multiple computers
- Avid cyclist
- Video game and table top game enthusiast, DND, MTG