Professional Summary _____

Software Engineer with 8+ years experience developing efficient object oriented code. I am passionate about developing modular game-play code and tools to allow for easy implementation and iteration. I have completed projects both individually and collaboratively as part of a team. My team finished our competitive MOBA/RTS asymmetrical PVP game, a link to download it can be found on my website or below. I recently was awarded 2nd place in Ubisoft NEXT for my project, in which I made my own 3D math library and ECS game engine. Both of these projects can be found on my portfolio website.

Skills

C++	C#	С	A* path-finding	ECS Engine Implementation	Steering Behaviors
Unity	OpenGL	Mini-Max	Behaviour Trees	Object Oriented Programming	Team Player
HLSL/GLSL	SFML	3D math	Inverse Kinematics	Mixin Design Pattern	Problem solving

Career Achievements

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 library to create a 3D game with a dynamic camera using the 2D graphics API provided by Ubisoft

Toronto Hydro Student award 2018/2019, Awarded to the student group that created a web application that could

2019 be used by Toronto Hydro in a real life application

Ryerson Capstone Design Project Excellence Award Gold, Awarded to best capstone project for Ryerson 2019 Engineering

Toronto, Canada

Toronto, Canada

Toronto, Canada

Education _____

Sheridan College Oakville, Canada

2022 - 2023

Toronto, Canada

2015 - 2019

Winter 2021

- · 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)

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

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

Work Experience _____

Gameplay Programmer ALWAYS SNACKING STUDIOS - SHERIDAN

Toronto, Canada

May 2023 - August 2023

- Working with a team to make a RTS game for our capstone project
- Implementing the Mixin design pattern to build a data-driven system to create modular gameplay features
- The Project can be found here https://always-snacking-studios.itch.io/the-big-vs-them-all

ONTARIO COLLEGE GRADUATE CERTIFICATE, GAME DEVELOPMENT: ADVANCED PROGRAMMING

Data Analyst Toronto, Canada

May 2020 - August 2020 KUBRA

- 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

September 2018 - April 2019 RYERSON UNIVERSITY

- 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

September 2016 - December 2016

July 2012 - August 2019

STOCK RENDER

• Work with startup team to develop stock processing website • Developed JavaScript algorithms to analyse and organise data from a SQL database

Office Assistant Toronto, Canada

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

TORONTO CATHOLIC DISTRICT SCHOOLBOARD

Physics tutor Toronto, Canada

PRIVATE TUTOR 2019-2020

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

Extracurricular Activities __

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