# **JOSEPH CAMERON**

22 Merner Ave, Ottawa ON, K2J 4A6

jf.cameron@gmail.com | 613-617-2475 | https://www.linkedin.com/in/joseph-cameron | jfcameron.github.io

# GAME DEVELOPER

Game Development graduate with real-life experience in project management, web programming and game development. Experienced in Object Oriented programming and Agile development methodologies. A quick learner who is keen to master new technologies and who is constantly developing new projects and demos doing just that.

Excellent communication skills for effective teamwork and the development of sound working relationships with clients and team members. Passionate and highly motivated game developer looking for an environment to apply my skills in game design and programming.

Portfolio project demos and explanations can be viewed at: <u>ifcameron.github.io</u>

Languages: C, C++, C#, Lua, Javascript, GLSL

Platforms: Windows, Android

**Software:** Unity, Visual Studio, Android Studio, Visio

**Graphics APIs:** OpenGL, OpenGL ES, WebGL **Version Control:** some Git and SVN experience

## **EDUCATION**

GAME DEVELOPMENT DIPLOMA - Algonquin College, Ottawa, ON

College, Ottawa, ON

Honours graduate (GPA 3.7 / 4) – Dean's List 5 / 6 terms

**School Projects included:** 

Sushi Joint Rumble (January 2014 - June 2015)

#### **Lead Programmer**

Developed a video game by leading and coordinating seven-person team for three semesters.

- Performed code reviews, created extensive documentation / diagrams.
- Wrote interfaces for team members to program their code against.
- Presented game to Ubisoft Toronto, 2015.

## WORK EXPERIENCE

#### MARKETING BREAKTHROUGHS, Ottawa, ON

June - November 2015

An Ottawa web design company providing creative and marketing services.

#### Web developer

Developed interactive micro sites, wrote / updated store interfaces, and performed site maintenance. Wrote plugins for Wordpress, Joomla and debugged existing code, working primarily in PHP and JavaScript, as well as CSS, SQL and Visual Basic.

- Consistently met project deadlines by organizing schedule / tasks efficiently and effectively.
- Increased knowledge and improved project efficiency by self-educating on new frameworks.
- Created seamless automatic export solution for client by writing code to format data in close collaboration with client and client's programmer.
- Developed a searchable product catalogue for client by researching solutions, developing a plan, presenting plan to manager and implementing solution in coordination with graphic designers.

2015

# JOSEPH CAMERON

22 Merner Ave, Ottawa ON, K2J 4A6

if.cameron@gmail.com | 613-617-2475 | https://www.linkedin.com/in/joseph-cameron | ifcameron.github.io

## **GAME PROJECT HIGHLIGHTS**

### VRDrive (January 2017 - Present)

Virtual reality car driving demo for Android devices. Requires the use of a Google Cardboard headset and a dual analog controller. The player races around a coastal course in an automatic car. Features an interactive car interior and engine sounds. Written in C#, using Unity. Environment modelled in Blender.

#### **GyroShooter** (December 2016)

Target shooting game for Android phones. The camera automatically moves along a track while the player uses their phone to take aim at targets in the game world. Written in C#, using Unity.

## **G3D** (June 2016 - Present)

Multithreaded 3D game engine. Long term personal project. Written in C/C++. Uses OpenGL, Bullet Physics, Lua and C++11 features (Smart pointers, threads). The renderer is capable of ambient, diffuse, specular lighting and shadow mapping (non cascading). Project demo & source available on my portfolio.

## **WebGL engine** (February - September 2015)

3D Javascript application. Features include a 3D renderer, rigid body physics simulation and an Entity Component System. WebGL 1.0. Live demo on the landing page of my portfolio.

## **Cross platform 3D renderer** (January - August 2015)

3D renderer written in C for Windows and Android platforms. OpenGL ES 2.0 and ANSI C. Java and JNI for the Android port.

#### **RPG Creator** (August - November 2015)

Game engine, level and script editor for classic RPG style games. Features an in-game level editor and script editor. Built for Windows and Android platforms.

#### Game of Life implemented in a DirectX Compute shader (July 2015)

Interactive game of life simulation. Runs concurrently on the GPU alongside a larger C# application, which communicates to the compute shader via a texture buffer. Example of GPGPU.

#### **Voxel renderer in a DirectX Geometry shader** (July 2015)

Entirely GPU-based voxel renderer. Terrain data is generated CPU side then pushed to the GPU via a 3D texture. A set of vertices are used to index the texture data and new voxel geometry is emitted from a geometry shader based on the data sampled in the texture.

## **AFFILIATIONS**

Attendee: STMicroelectronics - STM32F7 hands-on seminar, September 2016

Volunteer: Rideau Valley Conservation Authority, Summer 2016

**Presenter:** Developed and presented a seminar titled "Introduction to WebGL" for Startup Algonquin, a

student group at Algonquin College, November 2015

Participant: Global Game Jam, 2015

Attendee: Ottawa International Game Conference, 2012-2016

Attendee: Montreal International Game Summit, 2014

## REFERENCES

Available upon request.