

## Summary

- Graduated with Honours from Game Development program, Algonquin College, Woodroffe Campus, Spring 2015 (3.7 / A Average)
- Lead coder for a 3 semester group project to develop a game titled "Sushi Joint Rumble"
- Experience with C, C++, C# programming languages and Cg, GLSL graphics languages
- Have developed many projects including:
  - a 3D game engine for web browsers using Javascript and WebGL
  - a 3D renderer in C using OpenGL that builds for Windows and Android platforms
  - hardware accelerated voxel, tile and terrain renderers, compute shaders
- Experience with various OpenGL specifications, Box 2D, MonoGame and Unity as game development tools. I enjoy learning new technologies.
- Familiar with Objective-C and Java as they pertain to native IOS and Android development
- Sole full-time Programmer, Marketing Breakthroughs, an Ottawa web design company
- Experience with Git and SVN, Windows, Android, Lua
- **My work can be viewed on my portfolio at <http://jfcameron.github.io/>**

## Skills

### *Strong understanding of:*

- C, C++ and C# programming languages.
- the Object Oriented programming paradigm.
- Agile development methodology.
- plugin, gameplay and graphics programming for the Unity engine.
- the Entity Component System architectural pattern.
- communication skills in a team environment.
- OpenGL, OpenGL ES and the GLSL graphics language.

### *Experienced with:*

- Java and Objective-C languages as they pertain to porting C/C++ applications to Android and iOS mobile platforms.
- Javascript, CSS, HTML5 and WebGL as they pertain to developing 3D browser-based applications.
- various libraries commonly used in C/C++ game development such as GLM, Bullet Physics, OpenAL Soft.

### *Familiar with:*

- Some use of Git and SVN version control systems.

## Notable Projects

- Sushi Joint Rumble - [January 2014 - June 2015]
  - Lead programmer for a 3 semester group project to develop a videogame. Worked in a 7 person team leading and coordinating programming tasks. Performed code reviews, created extensive documentation, diagrams. Wrote interfaces for team members to program their code against.
- G3D - [June 2016 - Present]
  - Multithreaded 3D game engine. Written in C/C++. Uses OpenGL 3.3, Bullet Physics, Lua and many c++11 features (Smart pointers, threads, etc.).

- WebGL engine - [February - September 2015]
  - 3D javascript application. Features: 3D renderer, rigid body physics and an Entity Component System. WebGL 1.0.
- Cross platform 3D renderer - [January - August 2015]
  - 3D renderer written in C for Windows and Android platforms. OpenGL ES 2.0, 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. Featured 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. Ran concurrently on the GPU alongside a larger C# application, communicated to the graphics pipeline via a texture buffer.
- Voxel renderer in a DirectX Geometry shader - [July 2015]
  - Entirely GPU based voxel renderer. Terrain data was generated CPU side using a noise function, then pushed to the GPU via a 3D texture. A set of vertices were used to index the texture data and new geometry was emitted from the geometry shader based on the texture data.

## Education

- Honors graduate of the Game Development program at Algonquin College, Woodroffe campus. (GPA 3.7 / 88% / A Average)
- Mass Communications at Carleton University with focus on history. (incomplete)
- John McCrae High School, Nepean.

## Work Experience

- Web developer at Marketing Breakthroughs - [June - November 2015]
  - Full time web programmer. Wrote plugins for Wordpress, Joomla and debugged code that I had inherited.
  - Projects ranged from interactive microsites, writing or updating store interfaces as well as site maintenance.
  - Estimated the time and effort it would take to complete tasks, organized my schedule appropriately to match various project deadlines. Consistently delivered on schedule.
  - Worked primarily in PHP and JavaScript. Some work with CSS, SQL and Visual Basic.
- Overnight stocking at Loblaws - [August 2014 - June 2015]
  - Part time job during the final year of school
- Truck loading at FedEx - [June - August 2014, June - August 2013]
  - Seasonal job during the first two years of school, worked on summer and winter breaks

## Extracurricular

- Developed and presented a seminar titled "Introduction to WebGL" for Startup Algonquin, a student group at Algonquin College November 2015
- Presented "Sushi Joint Rumble" game as part of the development team to Ubisoft Toronto - early 2015
- Participated in Global Game Jam 2015
- Volunteered with Parks Canada doing water surveys and cleanup of local streams and rivers, summer 2016

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- Attended Ottawa International Game Conference 2012-2016
- Attended Montreal International Game Summit 2014
- Kayaking & camping, summers of 2014 - 2016
- Rugby and soccer in high school 2003 - 2006

References from: course instructors, managers, coworkers and peers. Available on request.