Joseph Cameron
jf.cameron@gmail.com
jfcameron.github.io

22 Merner Ave, Ottawa ON
K2J4A6
613-617-2475

Summary

- Currently employed as a software developer at You.i, with focus on multiplatform C++ video streaming applications for desktop, television and mobile.
- Graduated with Honors from Video Game Development program, Algonquin College, Woodroffe Campus, Spring 2015 (3.7 GPA)
- Experience with C, C++, C#, Java, and JavaScript.
- Experience with Cg, GLSL, and HLSL graphics languages.
- Have developed many projects including:
  - 3D rendering engine for web in JavaScript and WebGL
  - 3D renderer in pure C using OpenGL (Windows and Android platforms)
  - Various hardware accelerated voxel, tile and terrain renderers, compute shaders
- Previous experience as sole salaried developer at Marketing Breakthroughs, an Ottawa based web design company
- Experience with Git and SVN, Windows, Android, Lua
- My linkedin profile can be viewed at **https://ca.linkedin.com/in/joseph-cameron**
- **My work can be viewed on my portfolio at http://jfcameron.github.io/**

Skills

Strong understanding of:
- C++, C# and Java programming languages.
- Object Oriented design, RAII.
- Agile development methodologies.
- Entity Component System design pattern.
- OpenGL, OpenGL ES and the GLSL graphics language.
- Git, SourceTree, Github

Experienced with:
- Javascript, CSS, HTML5 and WebGL as they pertain to developing 3D browser-based applications.
- Various open-source libraries commonly used in C++ application development such as GLM, Bullet Physics, OpenAL Soft, GLFW, Box2D.
- Python, CMake and Bash scripting
- Jira, Slack

Familiar with:
- C and Objective-C languages.
- Some use of SVN.

Notable Projects

- G3D - [June 2016 - August 2017]
  - Multithreaded 3D game engine. Written in C/C++. Uses OpenGL 3.3, Bullet Physics, Lua and many c++11 features (Smart pointers, threads, etc.).
- G2Dj - [November 2016 - Present]
  - Game engine written in Java. Uses JOGL for OpenGL bindings on desktop. Uses a Perl preprocessor script for code branching to deal with API differences on Android.

Joseph Cameron
jf.cameron@gmail.com
jfcameron.github.io
22 Merner Ave, Ottawa ON
K2J4A6
613-617-2475

- GDK - [August 2017 - Present]
  - CMake C++ project. “Game development kit.” Redesign of G3D, with a focus on RAII and smaller, more concise objects.
- 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. Written in C#.
- Conway’s 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)

Work Experience

- C++ developer at Youi.i - [June 2017 - Present]
  - Developed the multi platform video streaming applications “Filmstruck” and “Movies Anywhere”
  - Developed and maintained a C++ API wrapper for C based Conviva analytics library
  - Diagnosed and identified various issues within existing codebase ensuring product delivery.
- Web developer at Marketing Breakthroughs - [June - November 2015]
  - Wrote plugins for WordPress, Joomla and debugged various platform issues.
  - Projects ranged from interactive microsites, writing or updating store interfaces as well as site maintenance.
  - Developed new functionalities in PHP, JavaScript, CSS, SQL and Visual Basic.

Extracurricular

- Developed and presented a seminar titled “Introduction to WebGL” for Startup Algonquin, a student group at Algonquin College November 2015
- Developed and presented “Sushi Joint Rumble” – a C# (Mono) based video game to Ubisoft.

References available upon request