

Education

2012 - 2016: University of Abertay Dundee

BSc(Hons) Computer Games Technology *Expecting 2:1*

Technology

Languages: C++(>15 projects), HLSL(2 projects),
MATLAB(3 projects), Python(2 projects),
C#(1 project).

Development Tools: Microsoft Visual Studio, Git with SmartGit,
Unity

Libraries and APIs: DirectX 11, OpenGL 3.0 (fixed-function),
XAudio2 & X3DAudio, Windows API, WinSock,
C++ Standard Library(incl. threading & containers),
SFML, Box2D, RapidXML.

Miscellaneous: 3D rigging/skinning with Autodesk Maya,
LaTeX with TeXstudio,
Level Editing with Tiled,
Image Editing with paint.net/Pixlr.

Projects

Honours Project - "Music Information Retrieval for Computer Games"

(2015-2016 *(Currently In Progress)* | C++ (SFML) & MATLAB | Windows PC)

- Currently I am working on my honours project which involves researching digital signal processing techniques to analyze music files.
- In addition, I am creating a rhythm game to demonstrate and explore creation of gameplay using the metadata retrieved by music file analysis.

Demonstrable skills: Initiative, Game Design, Problem Solving.

Group Project - "Galaxea" - Engine Programmer

(2014-2015 | C++ (Abertay Framework) | Sony PS Vita)

- In third year at university I participated in a professional group project working on a 2D game based on a brief by FuturLab.
- As the engine programmer I implemented many aspects of the game including the physics (using Box2D), level loading (using Tiled and RapidXML), menus and the state machine. I worked as part of a team of 8.

Demonstrable skills: Teamwork, Game Engine Architecture, Abstract Thinking.

Independent Project - "Handmade Hero" - Casey Muratori

(Ongoing | C++ | Windows PC)

- I am following along and independently studying and customizing Casey Muratori's Handmade Hero.
 - Has taught me a lot thus far including how an industry veteran goes about programming and has challenged me to reevaluate my views on paradigms such as object orientation.
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Personal Qualities

- Quick learner - I find the process of mastering a skill or achieving proficiency deeply rewarding and pride myself in being competent at what I do.
- Open minded and always willing to learn or consider criticism - wise enough to know that I don't know everything; everybody has something to teach me.
- Meticulous and conscientious - achieved 6 years perfect attendance throughout High School.

Hobbies

Computer Gaming

I enjoy games that have interesting mechanics, mechanical depth or involve mastering a skill. I tend to play online games

- Computer gaming as an interest and passion has provided me with some very useful skills ranging from working effectively in a team to optimizing efficiency in competitive environments. Learning is important when doing anything competitively and is a major factor in why I have have developed quick learning abilities.
- I have basic skills in image editing and interface design attained when customizing the user interface of various games I enjoy.

Computer Hardware and Peripherals

I have had an interest in computer hardware for a while and have above average knowledge about
