# **Ewan Duncan**

### CONTACT

LinkedIn: uk.linkedin.com/in/EwanDuncanGamesDeveloper

### **PERSONAL STATEMENT**

University graduate with a background in games programming and mathematics. Skilled at problem solving and working with others in a team environment. Currently looking for full time employment within the games industry.

### **KEY SKILLS**

#### C++

- 2D games with SFML and Abertay University's game framework
- 3D graphics applications with **DirectX** and **OpenGL**
- **Pathfinding** applications
- **Networking** application with SFML
- Audio game with XAudio2

#### C#

- Scripting for an interactive picture book and 3D games in **Unity**
- Implemented AI techniques such as Boids and Genetic Algorithms
- Used **Perlin Noise** and **Shape Grammars** to procedurally generate game content

#### Java

- 2D game using Eclipse.
- Application with networking technologies using Android Studio.

#### Matlab

- Used the **fuzzy logic** toolbox to build fuzzy inference systems.
- Numerically solved **Euler's equations** and plotted results.

### **TOOLS**

**SFML**: Used for multiple university projects and a game jam.

**Playstation Vita** development kits and the Abertay University's framework: Developed two 2D games.

**Box2D**: Used for **Playstation Vita** platformer game.

**Unity**: Used in game jams, a 3D game with procedurally generated content and for an interactive picture book

**Version Control**: Have experience using **Git** with **GitGui**, **Mercurial** with **TortoiseHG** and **Subversion** with **TortoiseSVN**.

# **WORK EXPERIENCE**

### Lead Developer / Programmer – July 2015 – October 2015

Team project organised by Abertay University. We were tasked with adapting a picture book into an interactive mobile app. The book was intended to teach young kids about depression and mental illness. The app had to have the same educational merit. We developed the app with Unity.

# Responsibilities:

- Maintained contact within the team whilst we all worked remotely.
- Exchanged regular emails with the project over seer and the author of the book to update them on the team's progress.
- Developed the app largely on my own using assets provided by the rest of the team.
- Utilised Unity's animation features to fade between scenes of the book.
- Implemented lightning effects that worked similarly to particle effects with object pooling.
- Designed a user interface that was unobtrusive and conveyed the themes of the book.

 Handled testing to ensure that the app was functional across a range of Android devices.

**Lead Programmer / Engine and Gameplay Programmer – October 2014 – April 2015**Student team project working for a live client as part of a University module. Our brief was to explore how alternative tutorial techniques could be used to guide a player around a game environment. We built a 2D game to do this using a C++ based graphics framework called SFML.

### Responsibilities:

- Organised meetings with the code team and maintained communication with the producer.
- Set up online repository and source control and instructed other team members on how to use them.
- Construction of the core game framework including the main state machine, a game object class and input manager.
- Implemented graphical tools such as lighting and post processing shaders.
- Implemented gameplay features such as throwing projectiles and breaking/moving objects.

### **EDUCATION**

# Abertay University Dundee 2012 - 2016

BSc (Hons), Computer Games Technology – Graduated with a 2:1 classification Key Modules: Professional Project – A, Game Professional Awareness – B, Applied Mathematics and AI – B, Applied Game Technologies – B, Procedural Methods – A, Network Programming – B, Honours Project Planning and Reporting – B, Honours Project Execution – B, Computer Operating Environments – B, Console Game Development – B, Graphics Programming – A, Computer and Graphics Architectures - A

## Perth High School 2006 - 2012

Advanced Highers: Computing - B

Highers: Maths – A, Physics – B, Information Systems – B Intermediate 2s: Classical Studies – A, Geography - B

Standard Grades: Maths - 1, Physics - 1, Computing - 1, Chemistry - 1, Classical Studies -

1, English – 2, French - 2

### **PERSONAL INTERESTS**

- I have a strong passion for media and art. This includes cinema, animation, books, comics and video games.
- I love dancing and have attended lindy hop and blues classes for over 2 years.
- I enjoy travelling and have visited many European countries. My travels have given me a broader view of the world and exposed me to many different cultures.

# **REFERENCES**

References available on request.