

## Rachel Crawford

Graduate game programmer looking for an entry level position in an established studio.

[rachelnertia.github.io](https://rachelnertia.github.io)

[rachelnertia@gmail.com](mailto:rachelnertia@gmail.com)

Mobile: (+44) 745 6917 471

### Technical Skills

Languages: C/C++, C#, HLSL, GLSL, Python, Lua, Java, ActionScript, (HTML, CSS, JavaScript...)

APIs and Libraries: Direct3D 11, OpenGL 3.0 (fixed-function), SFML, Maya API (C++ and Python), Windows API, WinSock, XAudio2 and X3DAudio, FMOD Ex, C++ STL

Development Tools: Visual Studio, Maya, Unity, PhyreEngine, Game Maker, Flash, LOVE, Mercurial, FMOD Designer

### Projects

More details and projects can be found online at [rachelnertia.github.io/projects](https://rachelnertia.github.io/projects).

#### AMPS – A Musical Platforming Symphony

2015 | Sony PhyreEngine | C++ | PC, PS4

- 2D platformer in which parts of the level move with the music
- 3 programmers, 2 sound designers, 1 artist, 1 level designer
- Demoed to the public for 4 days at our own booth at the Dare Indie Showcase 2015
- Roles: Managing audio asset pipeline; FMOD Designer and FMOD Ex API; synchronisation of game objects with beat of the music; fast-forwarding and slowing down of music; collision detection and response; menu system.

#### Interstellar Soirée

Global Game Jam 2016 | Unity | C# | PC

- 2D alien handshaking challenge
- 2 programmers, 2 artists, 1 sound designer

#### Graphics Programming with Shaders coursework

2014 | DirectX 11 | C++ | PC

- Creation of HLSL vertex, hull, domain, geometry, pixel and compute shaders
- Animated water surface demonstrating tessellation, reflection of cube-mapped sky, normal mapping, additive sine waves
- Compute shader implementation of 'Voxel Space' raycasting algorithm used to render convex terrains in early *Comanche* games and *Outcast*
- Geometry shader point-sprite expansion

### Education

2012-2016, Abertay University: **BSc (Hons) Computer Games Technology**. Expected: First.

### Other Things

- Secretary, Abertay University LGBT+ Society (2014-2016)
- Member, Abertay Game Development Society (2012-2016)
- Lab helper, Introduction to C++ (Abertay University) (2015-2016)

### Interests

When I'm not programming for university I play and develop games in my spare time, doodle compulsively and write about things. I have a speculative fiction habit. I like being nice.