

Profile

Versatile creative with a strong foundation in mathematics, art and computing. Second year computer science student and self-educated artist. Has skills in object-oriented programming, web design, mathematics, physics and games design.

Passionate and enthusiastic about the projects in which I engage and dedicated to ensuring their success and quality. Work well both within teams and independently and looking forward to getting along with future colleagues.

I want to thank you for reading this far and considering me for this position.

Contact me

jakephillipsdavies@gmail.com +447955 390439 <u>Personal Website</u>

LinkedIn

Skills

- Proficiency in C based languages (C, C#, Java, JS, Python)
- Extra-curricular experience with various other languages (C++, HLSL, Godot script)
- Familiarity with multiple game engines (Unity, Unreal, Godot)
- Understanding of mathematics and physics.
- Familiarity with source control software (Git, GitHub)
- Familiarity with game debugging tools (Unity's profiler, frame debugger)
- Quick to learn, adapt and get working with new programming languages, IDEs, engines or software.

Education

Bangor University 2023-26 - Computer Science

First two years were as comp. sci with games design then moved to straight comp. sci for third year as the optional modules gave a better learning outcome potential.

First year highlights:

- Mathematics for computing 98% grade.
- Game design 85% grade, worked on n-body gravity simulation and gameplay prototype for a flyable, decorable spaceship.

Second year highlights:

- 83% course average. Earned an "Outstanding Academic Achievement" award.
- Group project to develop a web app for M-Sparc in Anglesey. Team managing and creating professional code and designs for a client outside of the university.
- Creating two prototypes for a game idea: A map screen/tech demo and a prototype for first person movement in space and spaceship flight in a game with semi-realistic orbital mechanics.

Extra-curricular projects

Personal website

Designed to emulate windows 95 as a fun and unique way to display my work.

Interplanetary Postie

Developed further from my two 2^{nd} year game dev projects. A game project which currently has:

- Patched conics with Keplerian orbital mechanics (similar to Kerbal Space Program)
- Full scale planet terrain generation with using heightmaps combined with procedural noise.

The original prototypes were made in unity with the personal project ported to Godot due to engine advantages, personal preference and a desire to broaden myself.

Personal profile

Hi, I'm Jake. I enjoy playing games, making games and breaking games.

My game making projects have revolved around my love of space, maths and physics. I've spent more than a few nights wrapping my head around 70s astrophysics papers trying to get the orbital mechanics of my game to perform well.

Something that won't come up here much is that I'm also an artist. I particularly enjoy drawing people and anatomy, most of my notebooks are half filled with doodles. The design skills I've learned from this has been surprisingly handy.

To take a break from my many "indoors" hobbies I also like to go for walks in The local mountains and hills.