CHARLIE MORRIS

https://charliemorris56.github.io/

charlie.morris56@yahoo.co.uk

PROFILE

Recent graduate from Staffordshire University, studying Computer Games Programming.

Full-time Software Developer at Synectic Solutions. Working there part-time through the final year of university after completing a placement.

My favourite module at university was studio sim, a ten-person group project where we created an engine and game from scratch using DirectX11 and ImGui, the game involves planting plus bullet hell.

EDUCATION

♣ Staffordshire University · *Aug 2019 — May 2023*

BSc Hons Computer Games Programming

Third Year:

- Studio Sim | C++. Creating an engine and a game using DirectX11 and ImGui. Working on the TileMap and Entity tools as well as the entity planting and spawning gameplay.
- Dissertation | C++. Working on different techniques used within AI for optimisation: pathfinding (A*, JPS, HPA*), group behaviour (virtual/ physical leaders, flocking) and multithreading. Running all the optimisation tests using GoogleTests and built using SDL2.
- Mobile Game Development | Kotlin Android. Creating an interactive app in which a player makes the sound of the animal on screen. Aimed at young children.
- Low Level Programming | C++. Creating a custom memory management system, multithreading and Json loading.

Second Year:

- Group Project | C++ Unreal. Working on the player and gun systems as well as animations.
- Further Games and Graphics | C++ DirectX11. Importing models and using sharers. Physics and partial systems.
- Concurrent Network Application | C#. Working with networking to create a chat application with a built in game.

First Year:

- Fundamentals of Games and Graphics | C++. Creating a simple 2D environment and working with collisions. As well as creating a 3D environment and being introduced to lighting and textures.
- Game Engine Creation | C++. Creating a simple Mario style game with SDL2.

♣ University of South Wales · *Aug 2015 — May 2017*

Certificate of Higher Education Computing Mathematics

- Interactive Systems | Python. Creating an interactive game using the SenseHat on Raspberry Pi. This sparked my excitement for games development and engineering. The game involved rotating the SenseHat until the arrow pointed up on the SensesHat's 8x8 screen.
- Graphics | C++. Making 2D & 3D scenes within OpenGL.
- Website Developments | HMTL, CSS.
- Mathematics | Algebra, Calculus, Statistics, Applied Mathematics

EMPLOYMENT HISTORY

❖ **Software Developer, Synectics Solutions** .... May 2021 — Present

- Part of the client onboarding team, working with C# and SQL.
- Upgrading and maintaining the boarding tool, and adding and maintaining features for the Precision tool.
- Adhering to test driven design by writing unit tests using NUnit Framework.

❖ **Website Developer, IT Protocol** .... Oct 2020 — Mar 2021

- Working with HTML, CSS, JavaScript and PHP to create a website to the needs of the business.

❖ **IT Technician, IT Protocol** .... Mar 2018 — Aug 2019

- Management and support of IT systems, servers, desktops, switches, firewalls, licensing, and internet services.
- Speaking to customers and providing IT support.
- Traveling to clients' sites to perform maintenance and upgrades.
- Working with virtual machines and cloud services.

SKILLS

C++	C# ....
SQL	HTML & CSS ....
Tooling	Mathematics ....

HOBBIES

I am part of the snowboarding society, we went to Val d'Isére in my first year, we are planning to take another trip in April. Currently we practice on the dry sloop every week.

Before snowboarding, I would practice mountain boarding. Both of these sports are quite different in their technique. As a snowboard is flat, thus the board slides along the ground, whereas a mountain board has wheels.

In my youth, I achieved a blackbelt in kickboxing. I would practice with the semi-contact style, which means that the first person to hit scores the point.

For gaming, I enjoy playing DotA2 with friends or EU4 if I am playing alone. My favourite game of this year thus far is Hogwarts Legacy, I do think Elden Ring and God of War were stand out games last year.