CHARLIE MORRIS

https://charliemorris56.github.io/

charlie.morris56@yahoo.co.uk

PROFILE

Enthusiastic third-year student at Staffordshire University studying Computer Games Programming after completing a placement at Synectics Solutions and working full time as an IT Technician for two years and two years at the University of South Wales studying Computing Mathematics beforehand. Continuing to work part time at Synectics.

My favourite project thus far has been studio sim, a ten-person group project where we created an engine and game from scratch using DirectX11 and ImGui, the game involves planting and bullet hell.

Creating a fun game for the SenseHat Raspberry PI (Python), sparked my excitement for game development and engineering. The game involved rotating the SenseHat until the arrow pointed up on the SenseHat's 8x8 screen.

At IT Protocol and Synectic Solutions working hard on different projects developing a wide range of technical and soft skills.

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.
- Working with virtual machines and cloud services.

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.
- Disertation | 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 Andriod. 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 Appllocation| 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.
- Graphicis | C++. Making 2D & 3D scenes within OpenGL.
- Website Developments | HMTL, CSS.
- Mathematics | Algebra, Calculus, Statistics, Applied Mathematics

SKILLS

C++ ....   C# ....

SQL ....   HTML & CSS ....

Tooling ....   Mathematics ....

HOBBIES

Part of the snowboarding society went to Val d'Isére last year.
Black belt in kickboxing.
Mountain-boarding.
Gaming - I enjoy playing DotA2 with friends, or EU4 singleplayer. Hogwarts Legacy is my personal top pick for this year.