David Ogunlesi

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RELEVANT EDUCATION

University of Exeter | MSci Computer Science — Expected Grad. 2024

- Second-year **77.88%** overall grade.
- Third-year **71%** overall grade.

Relevant Modules:

- ECM3423 Computer Graphics - **100%** - (**Python** & OpenGL)
- ECM1400 Programming - **84%**
- ECM1414 Data Structures and Algorithms - **73%**
- ECM1400 Web Development - **78%**

RELEVANT DEGREE PROJECTS

Year 3 Dissertation Project — 2023

- **Expanded the Sugarscape** model to include altruism, investigating its impact on an ageing population in Japan.

Computer Graphics OpenGL Jungle Scene — 2022

University Project | **100%**

- Excelled in a personal project to create a jungle scene in **OpenGL**. Had to translate **C++** documentation to **Python** bindings.

Project Manager and Frontend developer for "Catpocalypse" Pokemon Go-inspired Web game — 2022

University Project | **84%**

- Led project to build a web app with ***ReactJS*** and ***Django.*** **Project Manager** and main **Frontend developer**. I was also the main asset **Artist**.

"Boxify" Java File Compressor — 2021

University Project | **90%**

- Built a File compressor with a ***Swing*** user interface in ***Java*** that uses multithreading to achieve optimal speeds on large files averaging **200-300kb/s**.

Python Crossword game

University Project | **90%** — 2020

- Designed and developed a crossword game in python with dynamically embedded words which included support for shared letters

RELEVANT EXPERIENCE

Game Studio Director & Co-Founder — 2020 - Present

PLASMARC LTD | London, UK

Founded a company to support the development of a ***video game project*** called "Containcorp" coded in the ***Unity Engine*** framework using ***C#***. Future plan is to market and sell the game.

Key Accomplishments:

- Implemented A* ***pathfinding algorithm*** for NPC simulations with support for multi-floor pathing via the ***Dijkstra algorithm. Room Detection*** algorithms***, Fluid Dynamics simulations*** using custom cellular automata model.
- Launched a small but growing ***Discord*** community with **70+ members** with a bi-weekly update blog.
- Developed a ***responsive website*** in 3 weeks to promote the game | https://containcorpgame.com/
- Acquired a ***Steam page*** https://store.steampowered.com/app/2483140/Containcorp/
- Earnt **£400+** revenue off Patreon page

RELEVANT PERSONAL PROJECTS

Promotional Website — 2023

- Developed a ***responsive website*** in 3 weeks to promote a commercial game project | ***https://containcorpgame.com/***.
- Developed with ***React***.

Card Party Game Mobile App 2022 - Present

- Creating a ***mobile app*** for a card game I designed, using ***React Native Javascript*** framework for frontend and ***Node-JS*** and ***Socket.IO*** for backend hosted on ***AWS***.

Python 3D OpenGL Engine 2021

- Creating a 3D engine using ***Python*** and ***PyOpenGL***. Implements **ECS, LOD terrain** and **dynamic sound**.

Muser - Room-based Spotify Sharing web app 2022

- Creating a web app that allows users to share ***Spotify music*** using room codes. Developed in ***ReactJS*** and ***Django***...

Commercial Video Game Project 2020 - Present

- Established a commercial simulation and management video game project with 2 friends using ***C#*** and ***Unity Engine Framework***.
- Devised around constructing the facility, handling all logistics from electricity, plumbing and waste disposal to containing the inmates used as guinea pigs and the aforementioned anomalies.

C# Galaxy System Simulation 2019

- Simulated a **100+** star galaxy system with celestial bodies using ***C#*** and ***Unity Engine Framework*** implementing procedural generation of planetary systems with fully simulated orbits.
- Structured the system according to density wave theory, creating characteristic spiral arms with **100+** stars, and designing the orbit model using 3-dimensional rotation matrices on oblate spheroid equations.
- Solved methods to produce "realistic" planet surfaces using stacked noise functions.

OTHER PERSONAL PROJECTS

I Can Explain Card Game 2022

- Created a fully designed prototype for an adult card game with **500+** unique cards.

Mandelbulb Render in Blender 2019

- Produced and procedurally rendered a Mandelbulb volume in **Blender** using mathematical equations represented as graphical nodes.

OTHER EDUCATION

Saint Olaves Grammar School | A-Level Grad. 2020

- Physics - B | Biology - B | Math - B.
- *Co-President*, Film Society.

Saint Olaves Grammar School | GCSEs Grad. 2018

- Physics, English Language | **Grade 9 (A*+).**
- Biology, Chemistry, History, Computer Science | **Grade 8 (A*).**
- Math, English Literature, Art | **Grade 7 (A).**

OTHER EXPERIENCE

Store Assistant 2018

Scope | London, UK

- Volunteered at a charity shop for **6 months** learning useful management and organization skills.

Architect Assistant 2017

Ansham Associates LTD | Folkstone, UK

- Presented a project to create software that monitors and models all data concerning a house.
- Met the deadline and software specification by cooperating with the boss throughout the **6 days.**
- Demonstrated brief documentation of 5 pages of research and development resulting in a commendation.

SKILLS

Git | Game Development | Java | Javascript | Python | C# | HTML & CSS | Javascript | PHP | React JS | Django | Adobe Creative Cloud | Video Editing | Blender | Graphic Design