

Brandon Ludford

Technical Designer

kritikal.io

WORK EXPERIENCE

Unreal Engine Technical Designer | Oct 2022 - August 2024

Skyhook Games | Liverpool

My time at Skyhook revolved around collaboration with designers, artists and my fellow technical designers to develop gameplay elements for a number of commercial projects. Additional information about these projects is available on my portfolio. The role involved heavy team-work and communication in order to produce commercial products.

Volunteering | Nov 6 2023 - Nov 12 2023

Thought Bubble Convention | Leeds

During my time volunteering at Thought Bubble Leeds, I interacted with the public, guiding them to where they wanted to go around the convention area. I was also assisting my fellow volunteers with setting up the tents and stalls for the convention. The environment I was in was face-paced and required me to work in coordination with my team-members to ensure the convention ran smoothly.

Senior Collaborative Project | October 2020 - May 2021

Staffordshire University

During my second year at Staffordshire University, I was tasked with being the Technical Lead of a group project. My responsibilities included being a guide for a team of first-years. I was able to guide them to create puzzle mechanics for the project. This project taught me a lot about team-work, managing scope, and understanding the abilities of my peers.

EDUCATION

Computer Games Design | 1st Honours | September 2019 - July 2022

Staffordshire University

This course covered the entire process of creating games. Game, level, and technical design, 3D modelling and animation, and Unreal Engine Blueprints. I chose to specialize in Technical Design; I was tasked with creating a final year project that reflects my abilities as a Technical Designer. I decided to do a tech demo of a boss fight.

Creative Media Production: Games Design | Triple Distinction | September 2017 - July 2019

Bradford College

This course served as my introduction to the Unreal Engine. Interestingly, this course also had me studying the history of game development, technological advances and how they were used to evolve video games, as well as moral and ethical considerations that video games should make. Overall, it was a mixed bag as far as the game industry is concerned, and was an excellent introduction to what the game industry can offer in terms of careers.

REFERENCES

Tom Foster

Lead Technical Designer | Skyhook Games

Contact information available on request

Tauheed Hisbani

Volunteer Coordinator | Thought Bubble

Contact information available on request

NOTABLE PROJECTS

Large-Scale Unannounced Unreal Engine 5 project

Skyhook Games | Liverpool

I worked as a part of a team of Technical Designers, Artists and Game Designers to develop a Large-Scale game in Unreal Engine 5. This project was a lot of fun to be a part of, and was an excellent stress-test for my abilities as a Technical Designer. Without going into too much detail due to an ongoing Non-Disclosure Agreement, here are some of my achievements in the project:

- Implemented a 'Quest Director' that was responsible for handling the flow of missions in the game world.
- Built-in Network Replication to my mechanics, utilizing Unreal's network debugging tools to ensure optimal performance in all network conditions.
- Built-in World Partition support in my mechanics, ensuring full functionality despite actors not having yet been streamed.
- A fully functional flying vehicle, utilizing procedural animation and UMG for an immersive experience.
- A fully functional ground vehicle that has its own inventory and a passenger system.
- A system that allowed Game Designers to create minigames that would be present in the game world.
- Several mechanics that utilize mouse/controller gestures for progression.
- Gave valuable feedback and influenced the game's feel.
- Developed a UI Material that allowed for easy floating UI icons that fit our Design Specifications.
- Maintained exceptional communication with our Game Designers to ensure their visions were accurately implemented into the project. To quote the feedback my Lead Technical Designer received about me - "Loving Brandon's communication, he lets us know if there's anything he needs, it's really helpful". Listing and acting on feedback, iterating on the systems I have built.
- Utilizing source control.

Archive: DZ

Passion Project

Archive: DZ is my ongoing Passion Project. The genre is Isometric Wave-Based Shooter. I chose this genre as I am a huge fan of the Killing Floor series. This project has so far taught me:

- The process (and benefits!) of creating in-engine tools, including Dynamic Mesh Generation.
- Game Balance.
- Creating and expanding state-based artificial intelligence.
- Creating expandable game systems, using non-destructive methods.
- Game Programming patterns.
- Organizing game-flow.

Simple Platformer

Global Game Jam (2020)

Simple Platformer is a First Person Puzzle Platformer game that I developed as a part of the 2020 Global Game Jam. While simple, this project taught me a few key lessons:

- Implementing a basic inventory system Level design and how to guide the player through a level.
- Optimizing scope.
- Developing my Spatial Reasoning

Bouncz

Mobile Game Tech Demo

Bouncz is a tech demo I developed for mobile devices. It served as a proof-of-concept hyper-casual game in which the player controls a ball that bounces on floating platforms. The player swipes right to move the ball across, the player has to time the swipes in order to land on the next platform. This project has a few interesting mechanics, such as:

- Procedural spawning of platforms
- A chance for a platform to spawn with spikes, this chance is increased depending on how high the player's current score is, after a few seconds the spikes will disappear
- Save/Load system