

Technical Game Designer

I am primarily a Technical Game Designer, with growing expertise in Systems Design and Gameplay Programming. My work is influenced by immersive FPS and simulation games, primarily using Unity, where I have amassed significant professional experience. Recently, I adapted a short film into a proof of concept for funding. Previously, at Interplay Learning, I developed interactive learning simulations for clients such as Carrier, ITI, and Goodman, and managed the localization of initial South African modules.

WORK EXPERIENCE

Technical Game Designer • Full-time

12/2023 - 06/2024

GRX Immersive Labs • Remote

GRX Immersive Labs is a future-forward studio that is powering the metaverse technologies the innovate storytelling, accelerate immersive education, and amplify culture. They mainly utilize UE5 and work in the film industry.

- Transformed the award-winning VR experience "POV: Points of View" into a playable Unity prototype, focusing on immersive storytelling and gameplay. Integrated educational principles from the project owner into the gameplay to enhance learning outcomes.
- Engineered core system mechanics and developed comprehensive design documentation, including game flowcharts and wireframes, to lay a solid foundation for future development phases.
- Integrated GenAI to create a dynamic persuasion mechanic, assessing player interactions based on success and suspicion metrics.
- Balanced stakeholder expectations by strategically leveraging GenAI technologies to enhance the game narrative and design, ensuring the technology served the game's fun and engaging elements without becoming gimmicky.
- Mentored a contracted employee, enhancing their skills in game production and transitioning from VFX to game development. Also, guided the employee in understanding Unity level design and game production dynamics.
- Advocated for additional resources to meet project goals, emphasizing the need for specialized technical expertise to enhance development efficiency. Coordinated interviews and evaluated potential engineers and AI specialists to support the project.
- Navigated shifting project scopes and diverse stakeholder demands, ensuring project alignment with strategic goals despite challenges such as unplanned shifts towards concepts like drone racing, cryptocurrency and learning modules.
- Persistently adapted to feedback, focusing on creating engaging and strategically viable game loops and action elements to satisfy investor and executive interests, despite not having a defined budget or dedicated engineering support from the outset.

VR Simulation Designer

08/2021 - 01/2023

Interplay Learning • Remote

- Produced 30+ individual modules in Unity across two projects for Carrier.
- Worked on the strategic team to build customized, immersive learning experiences utilizing both screen-space and VR for major clients, such as Carrier, ITI and Goodman.
- Seamlessly integrated technical and creative elements using C# (using makeshift scripts to test out functionality), Oculus VR, Unity, scripting for interactive functionality, and ensuring optimal animation using tweens.
- Played a critical role in the localization of the initial Gen-Catalogue scenes for the South African market, contributing to Interplay's aim to train one million South Africans by 2025.
- Mentored a new hire to effectively assume the role of localization efforts, demonstrating leadership and knowledge transfer capabilities.
- Managed camera placements and procedural step designs to enhance user comprehension and interactive experience.

Gameplay Programmer and Level Designer

10/2020 - 01/2021

Team Fame and Game • Remote

Team Fame and Game was formed from a diverse group of students from Full Sail University's Class of 2021, specifically assembled to undertake the capstone project, Vile Escape. This collaborative team comprised talented individuals from various disciplines within game design and development, tasked with creating a fully functional game prototype as part of their final academic evaluation.

- **Gameplay Programming:** Contributed to core gameplay elements, enhancing player interactions and game mechanics.
- **Quest Component Tool:** Engineered a versatile quest component tool that facilitated dynamic quest integration, enhancing narrative depth and player engagement.
- **Level Design:** Designed and developed the 'Subway' and 'Road' levels, drawing inspiration from iconic games like Resident Evil Outbreak to create immersive and challenging environments.
- **NPC and Dialogue Integration:** Implemented an NPC with quest-related dialogue barks. Then crafted the dialogue, enriching the storytelling aspect of the game.
- The project was highly praised by academic instructors, who recommended further development and commercial release. However, unanimous consent from all team members was required, and not obtained, to pursue this path.

EDUCATION

Bachelor's degree in Human-Computer Interaction (Game Design)

Full Sail University

01/2018 - 01/2021

Learned extensively how to utilize C# inside of the Unity Game Engine and briefly inside of UE4 with blueprints, using the AAA development pipeline, playtesting, and project scope/risks.

AWARDS & SCHOLARSHIPS

Honorable Mention, Long Form Format, 2022

09/2022

Science Fiction & Fantasy Poetry Association

PUBLICATIONS

Machine Learning-AI NPC Agents in a Digitally Immersive Environment

11/2023

Self-Published

Compendium Terminum

12/2020

Self-Published

PROJECTS

Existence Analysis Model

11/2023

The Existence Analysis Model is an innovative application of the distilBERT model, fine-tuned for IP-specific multi-classification. Originally trained to distinguish between ["Positive", "Negative"], this model now classifies text into six categories: ["Godless", "Godliving", "Mixed Origin", "True", "False", "Ambiguous"]. This adaptation was achieved using Argilla's space platform and deployed via Google Colab.

The model leverages a unique dataset specifically crafted for this project, containing over 300 entries across six features. This dataset was meticulously annotated and managed using Argilla, ensuring precise and relevant training inputs.

The primary objective of this model is to analyze and classify textual data based on the type of 'existence' it describes, providing a nuanced understanding of context and categorization in discussions related to divine or mythical entities.

For a detailed view of the dataset used for training this model, visit the following link: [Existence Analysis Dataset](#).

Explore the model on Hugging Face: [Existence Analysis Model on Hugging Face](#).

Design Test for Live Service VR PvP Game (X8)

07/2023 - Present

Thirdverse

Role: Game Designer

Link: X8 Design Test GDD

Overview:

Participated in a design test for a live service PvP game, tasked with creating a comprehensive Game Design Document (GDD). The document included detailed proposals for game mechanics, balancing frameworks, and technical specifications, and was recognized for its organizational quality, depth of research, and effective use of visuals.

Feedback Highlights:

Strengths: Well-organized content, thorough research, effective use of visuals.

Areas for Improvement: Enhanced balancing techniques, more detailed technical specifications for engineering implementation, improved clarity in phrasing, and more precise terminology.

Key Learnings:

- Recognized the importance of scalability and data analysis in game balancing.
- Understood the necessity of clear, technical writing tailored for interdisciplinary teams, including engineers.
- Learned the importance of using precise language and definitions to avoid ambiguity and enhance clarity.

Imp Unsummoning

04/2024 - 04/2024

Ludum Dare 55 Game Jam

Participated in Ludum Dare 55, a three-day game jam, where our team of three focused on the theme of 'Summoning'. "Imp Unsummoning" emerged as a creative endeavor that challenged players with intricate puzzle mechanics and strategic gameplay.

Key Contributions:

- Game Design and Content Development: Assisted in shaping the game's design, focusing on level layout and enemy placement to enhance player engagement and challenge.
- Level Design: Crafted engaging 2D sprite levels, ensuring each element was strategically placed to complement the core gameplay mechanics.
- Puzzle Mechanic Conceptualization: Inspired by the rune enchanting system from Elder Scrolls Online, I conceptualized and developed the 'rune-crafting' puzzle mechanic. This innovation was central to the game's theme of summoning, adding depth and a unique twist to the gameplay.

Impact:

My contributions significantly enhanced the thematic coherence and gameplay experience, making "Imp Unsummoning" a standout project at the game jam. The game was well-received for its innovative approach to the summoning theme and its engaging puzzle mechanics.

Void: Occultic Syntax

05/2023 - 05/2023

Terminus Interactive

Void:OS is an innovative hangman game that offers multiple input methods, including binary, multimap numberpad, and standard input. Developed in just two weeks, the game showcases a robust main loop created using Unity and C#. It is available for Android and can be played on web browsers via WebGL.

Explore the game on Itch.io.

For an in-depth look at the development process, view the Game Design Document (GDD) I crafted solo, leveraging ChatGPT to accelerate the development timeline: Void:OS GDD.