# WILLIAM CARSON

# GAME DESIGNER

### CONTACT



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**Portfolio** 



LinkedIn

# SKILLS

### Design

Blueprints in Unreal Engine

Blockmesh

Character

Camera

Control

Weapons

Mood Boards

Game/Character Balancing

ΑI

**Behavior Trees** 

Abilities

User Interface

### **Tools and Software**

Unreal Engine 5

Blueprints

Perforce

Jira

Confluence

Trello

#### **Bonus**

Microsoft Excel

**Project Management** 

Discrete Mathematics

Programming knowledge C++ knowledge

Fundamentals of Physical Science

Statistics

Analytics

Soft Skills

Adaptability Attention to detail

Teamwork

Effective communication

Patience

Leadership

# EDUCATION

# Game Design Bachelor of

Science

**Full Sail University** 

August 2022- December 2024

### WORK EXPERIENCE

### John J Jeffries

Dishwasher/Host

2018-2020

### **Double C**

Host/Food Runner/ Server

2020-Current

### **PROJECTS**

# **Game Designer**

Full Sail - Solo Project - Al Uprising

July 2024

- Designed and implemented engaging enemy AI using Unreal Engine's AI systems and Behavior Trees, creating immersive combat encounters with sight and sound detection.
- Developed a dynamic strafing system enabling Al to maneuver around the player, making calculated attack decisions, enhancing combat challenge and gameplay depth.
- Integrated non-linear level design with multi-path navigation across underground tunnels, above-ground pathways, and rooftops, allowing for varied player experiences and replayability.
- Incorporated optional objectives to increase player engagement and extend replay value, while maintaining an authentic military-themed environment using researched props and structures.
- Created gameplay tracking systems to display player progress and highlight missed objectives, encouraging exploration and interaction with all level areas.

# **Game Designer**

Full Sail - Team Project - Desert Shell

May 2024

- Iteratively designed and refined gameplay mechanics across weekly sprints to enhance Desert Shell, focusing on player engagement, visual clarity, and improved usability.
- Implemented a full 360-degree player rotation in Top-Down Shooter mode, offering players a more dynamic aiming and movement experience.
- Developed a horizontal slide mechanic for the Platformer mode, allowing smoother movement transitions and adding depth to level traversal.
- Enhanced weapon recognition by inserting a distinct shotgun model for the shotgun pickup, making it more recognizable and accessible during gameplay.
- Improved projectile feedback by adding glow effects, creating a visual distinction between character and enemy projectiles with unique effects: players' projectiles featured purple and yellow lightning balls, while enemies' projectiles displayed blue wind balls.
- Introduced outline effects for enemies, enhancing visibility and making them easily distinguishable in combat.
- Conducted regular playtests to refine mechanics, UI, and audio based on player feedback, ensuring a polished experience aligned with design goals and player needs.
- Collaborated with team members to integrate mechanics smoothly, maintaining game flow and balance to deliver a cohesive, refined prototype that met high standards for visual and gameplay clarity.

# **Game Designer**

Full Sail - Solo Project - Prism Shift

February 2024

- Designed and implemented an immersive light beam puzzle mechanic where players interact with crystal switches to activate and rotate beams of light, reflecting off objects to unlock new areas.
- Developed the core light beam functionality, including activation and rotation through player-controlled switches, enabling intuitive interaction with the game's environmental puzzles.
- Created reflective objects with precise angle settings to ensure the light beams redirected accurately, rewarding player experimentation and spatial awareness.
- Designed interactive level elements, such as doors opening and bridges moving, triggered by successfully aligning light beams with target points, allowing players to progress and discover new sections.
- Focused on clear visual cues and responsive feedback, ensuring players understood puzzle mechanics and could strategize solutions effectively.
- Prioritized player engagement through iterative testing and refinement, balancing challenge and accessibility to deliver a satisfying puzzle-solving experience.