



JOSH CASTILLO

Games Engineer

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CODING LANGUAGES

C C++ C# Python

TECHNICAL SKILLS

- Github and Perforce
- GitKraken
- Jira
- VS and VS Code
- Object-Oriented and Functional Programming
- Software Design and Architecture
- Agile development cycle.
- Unity
- Unreal and Blueprints

SOFT SKILLS

- Team Management
- Collaboration

ABOUT

Passionate Game Developer with a passion for bringing game ideas into reality. Skilled in Unreal Engine and Unity, with experience in gameplay mechanics, editor scripting, and multiplayer integration using Photon. Proficient in Unreal's C++ and Blueprints, Unity scripting, and incorporating VFX and UI designs to enhance gameplay and user experience. Focused on optimizing workflows and boosting productivity.

LANGUAGES

Spanish

English

Education

Graduation June 2025

University of California, Irvine

- B.S. Computer Science
- B.S. Game Design & Interactive Media
- 3.9 GPA

Work Experience

Jan 2024 - Present

Coding Minds

- Conducted 100+ personalized coding lessons with 50+ students, enhancing their programming skills and fostering dynamic learning.
- Collaborated with other Coding Coaches to assist in lesson planning and reviewed computer science concepts with students to solve problems.
- Monitored student progress, issued personalized reports to parents, and nurtured critical thinking and perseverance in over 50 students.

Projects

Sep 2024 - Present

DawnCore (Work in Progress)

- Created a detailed UML diagram to outline the game's systems, ensuring a clear architectural framework for the team and consistent feature development.
- Designed and implemented a flexible movement system that smoothly transitions between modes and preserves player momentum, applying linear algebra for realistic traversal on slopes and curved walls.
- Collaborated with designers to provide customizable movement mechanics, enabling tailored gameplay experiences.
- Developed a robust health system with support for healing, damage over time, invincibility modes, regeneration, and simple respawning mechanics.
- Created an "AI Director" algorithm for procedurally spawning enemies based on designer-defined metrics, and designed a dynamic pacing algorithm to control emotional intensity through gameplay.

April 2024 - June 2024

Quickshot

- Collaborated with designers to develop a flexible, responsive UI system supporting dynamic elements like scoreboards, menus, health indicators, and final screens.
- Weapon System Development: Implemented a shooting system with hit-scan and non-hit-scan modes, incorporating a seamless mode-swapping feature and a flexible weapon configuration system for dynamic adjustments of parameters such as damage, fire rate, and swap time.
- Gameplay Systems: Developed a respawn system, a data storage system for player statistics, and a modern lobby system where players could view their characters in real-time.
- Engineered data synchronization systems for critical match data (e.g., health, score, abilities) across clients, created serialization methods for non-default data types over Photon's framework, and developed backend functionality for player matchmaking and lobby systems.
- Collaborated with VFX teams to synchronize weapon and ability effects across the network, ensuring consistent visual fidelity during gameplay.

Sep 2023 - Dec 2023

Wartorn

- Designed and developed a flexible system enabling writers and designers to easily create and modify dialogue sequences, with full support for Dialogue Trees to enhance player immersion through meaningful choices.
- Worked closely with writers and designers to expose key properties, ensuring the system facilitated compelling story creation and adaptability throughout development.
- Created a typewriter effect for text and implemented smooth fade-in/fade-out animations for text boxes, enhancing the dialogue experience with immersive visuals and improved readability.

Leadership and Collaboration

June 2025 - Present

Programming Department Head - Edo Edo Teishoku!

- **Directed** a team of **7 programmers** in conceptualizing and executing various game systems.
- **Conducted** one-on-one **mentoring** sessions with fellow programmers to ensure their proficiency with the codebase and **addressed** any questions or concerns.
- Conducted both online and in-person meetings, **fostering** an **inclusive environment** for team members to contribute to system design discussions.
- **Collaborated closely** with other department heads to stay informed about the game's evolving designs and updates,