

Jason Di Chen

Website: www.jadchen.com
E-mail: jadchen2020@gmail.com

Gameplay systems engineer specializing in scalable gameplay architecture and systemic design. Experience building core gameplay systems in Unity and Unreal for AAA sports prototypes and award-nominated indie titles.

EXPERIENCE

Co-Founder & Gameplay Engineer | Aki Forest Games | Unity **Sept. 2025 - Present**

A from-scratch online co-op rogue-like ARPG featuring cross-class skill fusion.

- Architecting core gameplay systems including combat, enemy AI, modular skill frameworks, procedural event and map generation, scalable rogue-like content.
- Implementing co-op gameplay using Unity Netcode with server-authoritative combat, deterministic movement, and rewind-based validation for networked actions.

Gameplay & Physics Engineer (Team Lead) | Refactor Games | Unreal Engine **Sept. 2024 - Jun. 2025**

A prototype that led to the development of FIFA 2026 following a major publishing deal with Netflix.

- Developed physics-driven ball simulation systems including trajectory and interception prediction, Magnus effect, and aerodynamic friction for realistic football gameplay.
- Built the core ball interaction system powering passing, shooting, trapping, headers, and dribbling.
- Implemented a data-driven animation selection system evaluating player-ball position and velocity to synchronize predicted ball trajectories with the correct strike animations.
- Integrated systems for online multiplayer gameplay.

Game Systems Engineer | Journeyman | Refactor Games | Unreal Engine **Jan. 2024 - Sept. 2024**

A multiplayer co-op ARPG with class systems and procedural dungeon exploration.

- Developed modular world systems including zone management tools controlling weather, lighting, fog, clouds, audio, and enemy spawning through a unified interface.
- Built quest and dialogue frameworks enabling designers to author branching narrative content, including a procedural dialogue camera generating cinematic framing automatically.
- Designed a unified RPG UI framework with full controller support, integrating inventory, equipment, map, quest, and ability management into a single tab-based interface.

Lead Engineer & Designer | Try Again | USC Games | Unity **Sept. 2022 - Aug. 2023**

Independent Games Festival (IGF) 2024 Best Student Game Nominee.

- Led engineering development for an award-nominated indie title with 100,000+ players and an Overwhelmingly Positive (95%) rating on Steam.
- Designed and implemented core gameplay systems including character movement, procedural animation, UI frameworks, and shader effects.

SKILLS

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|---|---|--|
| - Programming
C#, C++, Python | - Tools & Pipeline
Perforce, Git, FMOD | - Gameplay Systems
Gameplay architecture,
Physics simulation,
Animation systems,
Combat mechanics,
AI behaviors,
Multiplayer gameplay |
| - Game Engines
Unity,
Unreal Engine,
OpenGL | - Mathematics
3D Math, Linear Algebra,
Quaternion interpolation,
Inverse kinematics | |

EDUCATION

University of Southern California
M.S. Game Development - 2023

University of California, Santa Cruz
B.S. Game Design - 2019