

**ZACHARY TIEU**  
**TECHNICAL DESIGNER AND ENGINEER**

**University of Southern California '25**  
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**Bachelor of Science in Computer Science Games**  
**310-251-0859**

Reliable and passionate Computer Science (Games) graduate from the University of Southern California with a strong foundation in gameplay programming, systems design, and interactive storytelling. A dependable, adaptive, and communicative team player who's relentlessly eager to learn. Experienced in rapid prototyping, AI behaviors, and full-cycle development. Focused on bringing to life intuitive and flavorful mechanics that empower players to craft their own stories.

**Languages:** C++, C#, Python, JavaScript, HTML, SQL

**Engines/Tools:** Unity, Unreal Engine, Godot, Twine, Git

**Methodologies:** Agile, Concentric, Waterfall

**Core Strengths:** Gameplay programming, systems design, AI behavior trees, prototyping, playtesting

**Bilingual:** Fluent in both English and Mandarin

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**Unchained – AI Engineer**

*Turn-Based Tactical RPG | Winner of 2025 USC Games Expo Audience Choice Award for Experimental Design*  
*| USC Capstone | Jan 2024 – May 2025*



- Engineered and refined over 10 bespoke enemy AI behavior scripts tailored for a gridless/nodeless tactical environment, addressing unique challenges in pathfinding, target selection, and ability execution.
- Collaborate cross-functionally with game designers and fellow engineers to iterate on and balance enemy archetypes, behaviors, and ability kits, as well as providing feedback and technical insight that helped shape player mechanics and ability interactions, ensuring a cohesive and engaging experience.
- Played a pivotal role in the project's success, contributing to a gameplay experience that was recognized with the Audience Choice Award for Experimental Design at the USC Games Expo 2025.

**Gallows Manor – Lead Programmer / Designer / Producer**

*Horror Puzzle Game | Aug 2024 – Dec 2024*

- Led a small interdisciplinary team from ideation through release, managing game development across programming, design, and production roles to bring a cohesive, atmospheric horror experience to life.
- Directed and analyzed iterative playtesting cycles, using qualitative feedback and usability testing to improve puzzle clarity, refine player onboarding, and streamline interaction design.
- Oversaw sprint planning, milestone tracking, and team coordination, ensuring timely progress and alignment with project goals despite tight academic timelines.

**Trendsetters – Playtest Lead / Gameplay Designer**

*Party Game | Sep 2023 – Dec 2023*

- Spearheaded structured playtesting initiatives, collecting and synthesizing feedback from diverse player demographics to drive iterative design and enhancing clarity, balance, and player engagement.
- Supported rapid prototyping and agile workflows, helping the team maintain a responsive development cycle and strong team cohesion.

**Cosmic Cafe – System Designer / Narrative Lead / Programmer**

*Cooking Sim | MEGA Game Jam | Summer 2023*

- Conceptualized and pitched the original game idea, establishing core mechanics and narrative direction in a high-pressure jam environment.
- Implemented movement, interaction, and simulation systems using Unity and C#, ensuring a smooth and responsive player experience within the jam's constraints.

**Crab Fight – Gameplay Lead**

*Board Game | Jan 2023 – May 2023*

- Designed core competitive mechanics for a strategic tabletop experience focused on player dynamics and humorous gameplay.
- Conducted extensive balance testing across multiple iterations, using playtest data to fine-tune pacing, player agency, and strategic depth.
- Managed documentation and presentation of design rationale, ensuring clear communication of mechanics to teammates and playtesters alike.

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**University of Southern California (USC)**

*B.S. in Computer Science (Games) – May 2025*

Dean's List Honoree

**Relevant Courses:** Advanced Game Project, Video Game Programming, Game Engine Programming