Teo Mendoza

Salem, Oregon | tjmendoza@willamette.edu | 510-989-5744

Portfolio

Education

Willamette University *Expected Graduation: 2027*
B.S. in Computer Science | Minor in Mathematics
GPA: 3.96

Projects

Multiplayer 3D Brawler – Work In Progress (GitHub)

- Designed the full gameplay loop and system architecture of a multiplayer free-for-all brawler, scoped for Unity with SpacetimeDB as the server-authoritative backend, covering mechanics, progression, and technical specifications.
- Structured a dual-layer state machine framework to govern player actions, animations, and input permissions, ensuring fluid transitions across movement, ability, and attack states.
- Outlined core combat systems including projectile logic, hit validation, and status effect mechanics, establishing a foundation for consistent and extensible gameplay.
- Created three distinct playable characters, each with a unique combat identity (aggressive short-range, evasive long-range, hybrid mid-range) and a complete ability kit consisting of a core attack, three base abilities, an ultimate, and passive traits.
- Drafted an initial gameplay map to support free-for-all combat, emphasizing player flow, sight lines, and spatial balance to encourage dynamic encounters and varied play styles.
- In progress: Unity implementation of core systems with SpacetimeDB for server-authoritative multiplayer functionality.

Terminal Fighter – LAN Multiplayer 2D Brawler (GitHub)

- Developed a 2D multiplayer fighting game for LAN 1v1 play, using Godot's high-level multiplayer API with a custom Flask-based matchmaking server.
- Built core combat systems including responsive movement, ability-driven interactions, and fast-paced mechanics to create a competitive and skill-based player experience.
- Designed and implemented two distinct playable characters, each with a unique combat identity and ability kit consisting of a core attack, two base abilities, and passive traits, tailored for variety and balance in head-to-head play.
- Created an arena emphasizing spacing, positioning, and timing to reinforce fighting game fundamentals within a minimalist 2D environment.
- Released an open-source GitHub repository highlighting the characters, abilities, and design decisions, alongside documentation for how to play the game.

Murder Mystery – Story & Character Design

- Designed a cast of 12 interconnected characters with distinct personalities, roles, and relationships, all woven into a larger cult-themed mystery narrative.
- Outlined a rough game concept including exploration, clue-finding, dialogue, hiding, and dynamic character behavior systems to frame how the story could be experienced as a full game.
- Created promotional TikTok posts showcasing character designs, generating over 10,000 views and 750 likes across multiple posts.

Work Experience

Teaching Assistant – Intro to Game Development (Unity)

- Supported 25 students during in-class coding demonstrations and project work by clarifying technical concepts, answering questions, and troubleshooting errors.
- Held weekly office hours to provide additional support with debugging, technical problem-solving, and feedback on game design ideas for individual and group projects.
- Graded homework and project submissions by assessing code quality, technical correctness, and creative design elements such as mechanic novelty, player engagement, and usability.

Pedalogical – Project Manager & Backend Developer

- Led a 3-person team developing Pedalogical, an NSF-funded AI-driven education platform launching in Fall 2025 with 100–150 students across multiple courses.
- Coordinated with faculty project lead to translate requirements into actionable tasks, manage workflows, and drive implementation cycles.
- Contributed to backend infrastructure and systems design, implementing scalable feature redesigns, analytics capabilities, and a database migration from SQL Server to PostgreSQL.

Resident Advisor – Willamette University

- Supervised a community of 50 residents and collaborated with staff to support 600 students across the broader housing area.
- Mediated conflicts, enforced university policies, and responded to crises to maintain a safe and accountable living environment.
- Planned and led weekly programs and large monthly events to foster community engagement, connection, and student well-being.

Skills

Game Design: Combat Systems, Multiplayer Game Design, Map Design, Narrative Design, Character Design

Game Engines: Unity, Godot

Programming: C#, Python, GDScript

Backend & Tools: SpacetimeDB, Databases (PostgreSQL, SQL Server), Git/GitHub

Awards

Murdock Science Research Conference – Best Presentation 2024

- Selected as 1 of 12 awardees out of 150+ project groups for presenting *Pedalogical*, our NSF-funded research project.