ETHAN PEREZ

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EDUCATION

Bachelor of Science, University of the Pacific Stockton, CA
Major in Computer Science May 2025
Minor in Media X
GPA: 3.95, Dean's List all semesters

Relevant Coursework
Computer Game Technologies, Game Design, VR Game Development, Virtual Reality, Computer Graphics, Application Development

SKILLS

Programming: C#, Python, Java, C++, C, WebGL
Engines & Tools: Unity, Unreal Engine 5, Godot, Git, GitHub
3D Modeling, Texturing, Rigging, Animation: Blender
2D Art and Animation: Photoshop, Aseprite, Paint Tool SAI

EXPERIENCE

Student Assistant Software Engineer August – December 2023
UNIVERSITY OF THE PACIFIC – Stockton, CA

- Conducted extensive QA testing to identify and resolve bugs, visual inconsistencies, and logic errors.
- Implemented final feature requests from the client, iterating on feedback until approval.
- Managed the deployment process, publishing the application on Android and iOS platforms.

Game Design & Development Teaching Assistant June 2023
UNIVERSITY OF THE PACIFIC – Stockton, CA

- Supported students with game development, debugging, and design across multiple platforms and engines (e.g., Unity, Unreal)
- Helped coordinate, evaluate, and provide feedback on student game projects.
- Mentored students in development workflows and core game design principles.

VR Research Assistant & Game Developer January - May 2023
UNIVERSITY OF THE PACIFIC – Stockton, CA

- Designed and developed a VR game for an omnidirectional treadmill, exploring natural player movement in immersive spaces.
- Authored and presented a research paper on locomotion in VR for IEEE VR 2023.
- Mentored future collaborators in Unity, Blender, and treadmill API integration to support project continuity.

3D Modeling & Printing Teaching Assistant June 2024
UNIVERSITY OF THE PACIFIC – Stockton, CA

- Guided students through 3D modeling software and supported successful 3D prints.
- Advised on modeling workflows and print settings for classroom projects.
- Instructed students on foundational modeling and rendering techniques using Blender.

PROJECTS

VR Mech Wars – Project Lead January 2024 – December 2024

- Led the design and development of a VR exer-game built in Unreal Engine 5.2 for an omni-directional treadmill.
- Managed a team of 4, assigning roles, mentoring teammates, and coordinating weekly development goals alongside academic work.
- Designed and implemented core gameplay systems using Unreal's visual scripting system.
- Authored and presented research on the project at two academic conferences (GET 2024 and NCUR 2025).
- Featured in a university-published article and video highlighting the project's innovation in VR and game design.

Immersive Roleplay Assistant – Solo Developer February 2024 - Present

- Developed an open-source Discord bot from scratch using the discord.py library, turning servers into fully interactive, RPG-style roleplay environments.
- Implemented dynamic systems for room-based channel logic, inventory management, and in-game object handling.
- Maintained and expanded the bot's capabilities over the course of a year.

Glidy Grid – Solo Developer November 2023

- Designed and developed a complete 3D arcade game in Unity over a single weekend.
- Programmed a replayable gameplay loop with randomized obstacle generation and coin collection mechanics using C#.
- Balanced rapid development with academic deadlines, delivering a polished prototype playable from start to finish.

VR Research – Solo Developer & Researcher August-December 2023

- Designed and developed a singleplayer VR game focused on natural, in-place player interaction, avoiding artificial locomotion to reduce motion sickness.
- Built core systems in Unreal Engine 5.3, including enemy behavior, wave progression, and VR interaction mechanics.
- Conducted user playtests to evaluate comfort and immersion, using feedback to refine gameplay balance.
- Authored a formal research paper analyzing stationary VR design and its impact on player experience, with emphasis on motion, comfort, and engagement.

LOOKABOUT – Project Lead October 2023

- Led a team in the design and development of a top-down 8-bit horror game created in one week for SCREAM JAM 2023.
- Pitched the original concept and built the prototype, establishing the core gameplay loop and horror mechanics.
- Assigned roles and responsibilities based on team member strengths, maintaining daily check-ins to manage progress
- Coordinated a strict development timeline to ensure the project was completed on time.