

Krystal Gutierrez

956-844-7826 | krystal.gtz@utexas.edu | Austin, TX
github.com/KrystalGtz || linkedin.com/in/krystal_gutierrez

EDUCATION

The University of Texas at Austin, Austin, TX

Dec 2026

Bachelors in Computer Science

Relevant Coursework: Data Structures, Computer Architecture, Operating Systems, Object Oriented Programming

Honors & Awards: 2024 & 2025 Hispanic Scholarship Fund Scholar

SKILLS

Technical Skills: *Advanced Java and C++, C#, C, Lua, Unreal Engine, Unity, Linux, Git, Github, Gitlab*

Languages: *Fluent English, Advanced Spanish*

EXPERIENCE

Texas Advanced Computing Center (TACC), Austin, TX

March 2025 - Present

Undergraduate Research Assistant

- Designed and developed a 4-player cooperative multiplayer Unity game where players collaboratively manage a restaurant, integrating core computer science concepts into gameplay to reinforce computational thinking through collaborative play.
- Wrote and maintained gameplay and networking code using *Fishnet: Networking Evolved*, handling real-time player synchronization, shared state logic, and cross-client mechanics, while also assisting in setting up and managing a Linux-based server via command line for hosting multiplayer sessions.

Texas Convergent, Austin, TX

August 2024 - December 2024

- Programmed a game prototype in Unreal Engine using C++ and blueprints with a focus on making AI characters that players could drag and drop for the Peace Foundation.

PROJECTS

Van Helsing - Unity Game Project

June 2025

- Developed object interactions, player mechanics, enemy behavior, and a boss phase using Unity C#.
- Implemented physics-based systems and integrated animations for characters and gameplay elements.

Operating Systems Pintos Project

January 2025 - April 2025

- Built a custom shell and implemented threading to understand process creation, scheduling, and system interrupts using C.
- Extended Pintos to support user programs and virtual memory, exploring paging, page replacement, and OS-user interactions.

Asteroid Mania - Unity Game Project

July 2024

- Developed an asteroid fighting game using C# in Unity during a 48-hour game jam.
- Designed and programmed spaceship movement, turret mechanics, and shooting systems, optimizing for smooth gameplay.

System Emulator

November 2024 - December 2024

- Designed and implemented multiple hardware simulators in C, gaining hands-on experience with CPU components and functionality
- Developed and optimized PIPE and SEQ implementations, including hazard control and pipeline mechanics. Utilized caches and extended chArm instruction sets to enhance system performance and emulate advanced processor features.

LEADERSHIP & COMMUNITY INVOLVEMENT

Electronic Game Developers Society

September 2023 - Present

Community and Socials JO → Outreach and Recruitment Officer → Main Events Officer

- Organized and promoted the largest Texas Game Jam (TxGJ) in EGaDS! history, drawing 200+ participants and 40 game submissions.
- Directed weekly development meetings for a semester-long game project, serving as the primary contact for all team leads, coordinating cross-team communication, and ensuring progress updates.
- Managed the organization's GitHub repository, including conflict resolution, issue tracking, and task assignment for the programming team.