PEDRO FONSECA

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EDUCATION

University of Michigan - Ann Arbor **Ann Arbor, MI**
Bachelor of Science Engineering in Computer Science *Aug. 2020 - Dec. 2024*
GPA: 3.858
Coursework: EECS 280 - Programming and Introductory Data Structures, EECS 281 - Data Structures and Algorithms, EECS 494 - Introduction to Game Development, EECS 490 - Programming Languages.

Next-Gen STEM Scholars Program **Remote**
Networking and Professional Development *July 2020*
Fundamentals of Data Science, Pre-Calculus, and Environmental Sciences among a community of minorities in STEM.

INTERNSHIP EXPERIENCE

WolverineSoft Studio - Project Nova **Remote**
Programmer *May 2023– Present*

- Working on a team of 49 students in the development of a 3D, rogue-like case study based on Nova Drift.
- Assigned to a programming subdivision of 7 students to implement the game functionality and the encounter-related requests by the game design team.
- Following an AGILE work ethic with tools like Jira, Confluence, and Bitbucket to maintain our project.
- Implemented features such as enemy movement patterns, screen wrapping, and hazard systems.

RESEARCH EXPERIENCE

Undergraduate Research Opportunities Program (UROP) **Ann Arbor, MI**
Researcher *August 2020 - April 2021*

- Collaborated with Dr. Julie Boland and a team of 4 researchers to study Dynamic Attending Theory.
- Developed a controlled, conversational paradigm to test latency between interlocutors over Zoom.
- Presented findings at the 2021 UROP symposium and published them in the Journal of Experimental Psychology.

Zoom Disrupts the Rhythm of Conversation

Boland, J. E., Fonseca, P., Mermelstein, I., & Williamson, M. (2021, November 8). Zoom Disrupts the Rhythm of Conversation. Journal of Experimental Psychology: General. Advance online publication. http://dx.doi.org/10.1037/xge0001150

PROJECT EXPERIENCE

EECS 494 - Project 3 **Ann Arbor, MI**
Game Designer, Developer, Level Designer, Project Manager, Programmer *Feb. 2023 - April 2023*

- Developed a 3D physics game with a core mechanic of "sling-shotting" to expand our skills past the 2D setting.
- Learned and utilized the industry-standard software Jira to handle task and time management.
- Designed 3D levels in Unity and handled checkpoint and player-state systems to maintain a closed game loop.
- Delved into armatures and 3D soft-body physics in the creation of slime assets to learn the basics of Blender.
- Maintained an Iterative Design Process through weekly playtesting sessions to support feedback-driven development.

EECS 494 - Project 1 **Ann Arbor, MI**
Level Designer, Character Designer, Programmer *Jan. 2023*

- Redeveloped the first dungeon for the original NES Legend of Zelda game to set a powerful foundation on the Unity game engine.
- Implemented the character's (Link's) weapons and inventory for practice on player controllers.
- Explored Unity's toolkit for dungeon creation to gain knowledge on tile palettes, coroutines, and scene management.

SKILLS

- Proficient in C++, C#, C, OCaml and familiar with Rust and HTML/CSS.
- Unity, Git, PlasticSCM, Jira, and familiar with Blender.
- Bilingual. My first language is Spanish and I am 4th-term proficient at the University of Michigan.