

PEDRO FONSECA

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EDUCATION

University of Michigan - Ann Arbor

Bachelor of Computer and Cognitive Science

GPA: 3.653

Coursework: EECS 280 - Programming and Introductory Data Structures, EECS 281 - Data Structures and Algorithms, EECS 494 - Introduction to Game Development, EECS 498 - Extended Reality and Society

Next-Gen STEM Scholars Program

Networking and Professional Development

Fundamentals of Data Science, Pre-Calculus, and Environmental Sciences among a community of minorities in STEM.

Ann Arbor, MI

Aug. 2020 - Dec. 2023

Remote

July 2020

INTERNSHIP EXPERIENCE

WolverineSoft Studio - Project Nova

Programmer

Remote

May 2023– Aug. 2023

- 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)

Researcher

Ann Arbor, MI

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: Slime-Handed

Game Designer, Developer, Level Designer, Project Manager, Programmer

Ann Arbor, MI

Feb. 2023 - April 2023

- Developed a 3D physics game with a core mechanic of "sling-shooting" 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 498 - Project 3: SpeakVR

Project Manager, Programmer

Ann Arbor, MI

Nov. 2023 - Dec. 2023

- Linked user behavior to audience behaviors allowing the user to assess the quality of their speech without the need for text UI.
- Utilized Unreal blueprints to establish the affordance system allowing us to add user interactions through overrides of the affordance class "interact" function.
- Implemented the note card system to replicated note usage in real-life speeches.
- Manged the tasks for each sprint based on team discussion in support of the iterative cycle process.

SKILLS

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