# PEDRO FONSECA

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## EDUCATION

**University of Michigan - Ann Arbor** **Ann Arbor, MI**
*Bachelor of Computer and Cogntitive Science* *Aug. 2020 - Dec. 2023*
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** **Remote**
*Networking and Professional Development* *July 2020*
Fundamentals of Data Science, Pre-Calculus, and Environmental Sciences among a community of minorities in STEM.

## WORK EXPERIENCE

**WolverineSoft Studio - Project Nova** **Remote**
*Programmer* *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.

**AppStop.io - One Tap Victory Lap** **Remote**
*Programmer* *Sep. 2023– Nov. 2023*

- Built and shipped a mobile app to the App and Google Play store with a team of 4 developers.
- Implemented a notification system to guide players to previously missed menus using static class structures.
- Integrated UI/UX elements into an in-progress project to allow the player to see their reward progress and familiarize myself with the existing codebase.

## PROJECT EXPERIENCE

**EECS 494 - Project 3: Slime-Handed** **Ann Arbor, MI**
*Game Designer, Level Designer, 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 498 - Project 3: SpeakVR** **Ann Arbor, MI**
*Project Manager, Programmer* *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.

## 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.

## 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.