

Education

University of Miami

BS Computer Engineering/Physics/Mathematics, GPA: 3.941

Coral Gables, FL

Aug 2022 | May 2026

Work Experience

ECE118 - Introduction to Engineering Coral Gables, FL *Teacher Assistant Aug 2023 | Dec 2023*

- Assist students in understanding and applying coding concepts.
- Graded exams and homeworks to provide feedback to help students enhance their coding skills.

Skills

Programming: Modern C++, C#, C, Python, HTML5, Javascript, CSS, SQL, BCPL, Mathematica

Tools: Linux, Visual Studio, Unity, Excel, Word, Powerpoint

Languages Native Spanish, Native English, Working Latin, Working French

Projects

Wizards RPG - Co-Developer C++, SDL2, OpenGL, ASIO

<https://github.com/20Sianjave04/Wizards>

I led the development of Wizards RPG, a MMORPG featuring a robust client-server network and a custom 2D graphics engine. I developed the game's core systems using C++, SDL2, ASIO, and OpenGL, focusing on scalable multiplayer functionalities and real-time synchronization.

Advanced Pathfinding and Dynamic Map Visualization C++

For ECE318, I developed a route-finding application that calculates optimal paths between geographic locations using a precision-enhanced algorithm. This application features streamlined driving instructions and steps on indential road segments. For extra credit, I identified the smallest map tile covering specific start and end points, visualized routes on altitude-color-coded maps, and utilized standard C++ libraries for efficient data management and graphics rendering

Simonstein 3D C#, Unity

<https://github.com/20Sianjave04/SimonStein3D>

Developed "SimonStein 3D," a fully immersive 3D first-person shooter game inspired by the classic "Wolfenstein 3D." Leveraged Unity to design and implement a rich, interactive game environment, Integrated complex game mechanics, including navigation, enemy AI, and inventory system

Awards

Honorable Mention 2022

International Mathematics Olympiad (IMO)

Recognized for exceptional problem-solving skills in mathematics at an international level during the 2022 competition

Provost's Honor Roll (All Semesters)*University of Miami*

Achieved consistently high academic performance leading to recognition on the Provost's Honor Roll every semester