

Diego Aguilar

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EDUCATION

Bachelor of Science in Computer Science

August 2022 – May 2026

University of Florida, Gainesville, FL

- GPA: 3.71 / 4.00
- Relevant Coursework: Applications of Discrete Structures, Data Structures & Algorithms, Introduction to Computer Organization, Introduction to Software Engineering, Object-Oriented Programming, Study Abroad
- UF In Japan: Cross Cultural Design.

PROFESSIONAL EXPERIENCE

Teaching Assistant

January 2023 – Present

COP3503C | University of Florida, Gainesville, FL

- Managed a lab section which elaborated on topics and concepts, demonstrated how to put them in action, and assisted students on projects such as a take on Minesweeper.
- Contributed on the back end of the course helping with a variety of things from planning of course schedule to creating labs and their documentations.

PROJECTS

DGE (Diego Game Engine)

May 2021 – Present

- Developed good practices for improving code modularity in a big project.
- Studied many low level aspects of a game engine such as render pipelining by using only C++ and OpenCL.

Disaster Family

June 2024

CEN4930 | University of Florida, Kyoto, Japan

- Collaborated with a team to create a game focused on Cross Cultural Design and, specifically, Disaster Prevention.
- Implemented core mechanics utilizing design patterns, including decorators, commands, and mediators.

Spell Checker

November 2023

COP3530 | University of Florida, Gainesville, FL

- Lead a team to create a spell checker used to compare two Data Structures in a certain context.
- Implemented a GUI to assist in the demonstration of the project, including a Trie traversal visualization in SFML.

Minesweeper

November 2022

COP3503C | University of Florida, Gainesville, FL

- Implemented certain design patterns, such as singletons and fluid builders, to develop an expandable final product.
- Worked with the SFML Library to create a window and display graphics.

Itch.io Games

May 2020 – Present

- Developed and improved my ability to use Unity and code in C#.
- Planned and coded the implementations of various features in all of my games utilizing Unity Scripting API.

SKILLS

Programming Languages: C, C++, C#, Java, Javascript, Python, HTML, CSS, MATLAB, AutoHotkey, LaTeX, ARM Assembly, OpenCL, Makefile, CMake, Rust.

Skills/Awards: Command Prompt, Unix, Design Patterns, Unity, SDL2, SFML, Git, GitHub, GitHub Actions, Databases, Blender, Photoshop, Premiere, UF Dean's List.