Arturo Portelles

PROJECTS

Graphing Calculator

Desktop Application - Lua / Löve

- A collaborative project built with the purpose of graphing a wide variety of functions. The application is able to graph and return an approximated bounded integral using Riemann sums.
- Built with Lua and LÖVE using Git/GitHub for version control.

Maze Generator and Pathfinding Visualizer

Desktop Application - Python / Pygame

- The application generates random mazes of variable size using a Backtracking algorithm. It also animates the 'flood filled' path and the solution path using Breadth First Search on the open nodes of the maze grid.
- Built with Python and Pygame using Git/GitHub for version control.

"WebSort" (Sorting Visualizer)

Web Application - JavaScript / HTML / CSS

- Sorting visualizer allowing the user to select from a variety of different popular sorting algorithms such as Quick sort, Merge sort, and Bubble sort. The user is also able to alter the number of elements and speed of the animation.
- Built with HTML/CSS and JavaScript. Hosted through GitHub pages.

EDUCATION

Florida International University

2018 - 2022

Bachelor of Arts, Computer Science

- 3.72 GPA
- Dean's List
- Bright Futures Scholarship (Florida Academic Scholar)

COURSEWORK

Data Structures (Spring 2020) Fundamentals of Computer Systems Programming 1

Programming 2 Systems Programming (Spring 2020) Databases (Spring 2020)

SKILLS

Python Java Git/GitHub Lua HTML CSS JavaScript