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. 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