https://joyjacksonthomas.github.io/Portfolio/
https://www.linkedin.com/in/joy-thomas-634a1b177/

Joy Jackson Thomas

joy.jackson.thomas98@gmail.com – (860) 501-3373
Washington, DC 20017

Summary

Game Programmer with a Minor in Mathematics. Well versed in game AI, Physics, Networking, Graphics, Tools Programming, 3D Math, and Linear Algebra

Education

Champlain College, Burlington VT — Graduated May 2020
Bachelor of Science in Game Programming and Minor in Mathematics

Projects

Frog Bath — September 2019 - May 2020

- Lead Programmer of a free co-op video game made in Unreal engine available for play on Steam
- As Lead Programmer I organized the development cycle, managed programmer meetings and helped resolve bugs my teammates had as well as solved mathematical and arithmetic problems related to gameplay, graphics, and networking code
- Garnered a lot of positive reception, out of hundreds of reviews 83% of people recommend the game

Sealed Sorcery — July 2017

- An online fighting game made in Unity for the 2018 Touhou Game Jam, an event in which developers were given 48 hours to make a game around the theme “Only Once”
- Programmed a variety of gameplay features as well as the networking code using the Raknet plugin that I developed with a team member in our Networking class

Emergency Preparedness Plan — May 2017 - August 2017

- An initiative taken on with the World Bank and the George Washington University’s Center for Urban Environmental Research
- Geolocated dam locations in African countries and linked their location to information about evacuation plans for communities at risk in case of dam collapse
- Wrote a C++ program that parsed through a large amount of weather station data going all the way back to the early 1900s

https://joyjacksonthomas.github.io/Portfolio/
https://www.linkedin.com/in/joy-thomas-634a1b177/

Independent Projects

2.5 Games Tool March 2022 - Present

- A tool for Unity made to help game devs make games in the vein of Klonoa, Tomba 2, and Nier
- As the solo developer of this tool I coded the tools that allow developers to make 3D Bezier Paths, split Paths, link Paths to one another, and the Custom Physics that was required to make the player and other physics objects interact with these Bezier Paths.

NavAI July 2021 - Present

- A tool for Unity made to help game devs create Navigation Meshes and have AI units path find and move on the Mesh
- As the sole developer of this tool I coded the NavMesh editor as well as the path finding and path following algorithms

Super Goat Death September 2018 - December 2018

- An intense top down shooter made in Unity for my Advanced Game Programming Seminar
- As a solo developer of this game I made the art and programmed every gameplay feature, including the Boss AI patterns, Menus/UI, and Tutorial

Technical Skills

- Unity, Unreal, C++, C#, C, Raknet, OpenGL, WebGL, Vulkan, Allegro, SDL, Python, Java, HTML, CSS, JOSM, GitHub, Repository Maintenance, Mesh manipulation/generation, and Agile Scrum Development

Work Experience

Programming Internship June 2017 - July 2017
George Washington University's Geography Department

- Worked in JOSM, an extension of Java that allows the user to map and upload data to Open Street Maps, mapping and linking data to dams as a part of The World Bank's emergency preparedness plan to prevent casualties from dam breaks
- Wrote a program in C++ that sorted through weather station data from thousands of weather stations going back to the 1700s

Tutor - Work Study September 2017 - February 2018
King Street Center

- Tutored Students in grades ranging from elementary school to middle school
- Taught an after school game programming course
- Made sure that the students were in a safe space that cultivated learning

Residential Assistant January 2018 - May 2018
Champlain College

- Acted as a Residential Guide, helping resolve community issues, and provide mentorship and support to residents
- Socialized with a wide demographic of residents, creating many friendships
- Cultivated a safe space for residents to be able to freely express their identity