

Payton Falcone

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EDUCATION

Wentworth Institute of Technology, Boston, MA

Aug. 2024

Bachelor of Science in Computer Science

GPA: 3.87/4.0

Honors: Summa Cum Laude

Relevant Courses: Data Structures, Algorithms, Databases, Network Programming, Data Science, Operating Systems, Programming Languages, Parallel Computing, Software Engineering, Network Administration

SKILLS

Programming Skills: Java, Python, HTML & CSS, C#, SQL, C++

Technologies: JetBrains IDE, Visual Studio, Unity, Unreal Engine, Git/GitHub, Windows Server 2012

PROJECTS

Lite Souls, C++, Raylib

July 2024 – Present

- Created a custom game engine using Raylib to develop an action RPG in a group of two
- Implemented enemy NPC AI with advanced behaviors including patrolling and pathfinding
- Designed a custom-built physics engine that handled collision and ray cast based detection for enemies

A Clonesday Adventure, JavaFX

November 2021 – December 2021

- Constructed a boss rush platformer game using JavaFX in a team of four
- Included four levels that highlighted different data structures such as queues, stacks, binary trees, and the sorting algorithm Merge Sort
- Designed menu GUI to select each individual level through unique key presses
- Created the game using many organized classes and helper methods in Java
- Used GitHub to help with team collaboration

Slime Slayer RPG, C#, Unity, Butler

February 2023 – Present

- Independent Unity Project which encompasses five separate zones in a 2D RPG style game
- Utilized Binary formatters and file streams to safely and securely store player data using the save/load system
- Deployed the project demo to a game marketplace to allow for testing of the mechanics
- Used the command line tool Butler for source control and to upload patches to the demo seamlessly

Miniscape, C#, Unity

April 2024

- Group project developed using Unity Engine during a week-long game jam
- Constructed three levels featuring wall-jumping, corruption, bonus win conditions, and advanced platforming
- Implemented dynamic gravity mechanics, shifting the gravitational pull depending on player position

Instagram Engagement Tool, Python, Selenium, PyQt5

August 2021 – Present

- Worked in a team of three to automate Instagram activity
- Operated selenium web driver to interact with web elements on Instagram's website
- The tool contains actions such as: liking, following, direct messaging, commenting, and unfollowing based on user input
- Designed GUI using PyQt5 to take in user input for each field

RELEVANT EXPERIENCE

Soulful Language – Web Developer Intern, HTML, CSS, JavaScript

January 2023 – April 2023

- Collaborated with the company to develop multiple prototype websites to display their brand including a prototype that used JavaScript and Passport to create a mock login section
- Designed and deployed a final website to dozens of clients
- Completed maintenance on the website, constantly making improvements