

Shane Doherty

(914) 393-9134 | s.doherty348@gmail.com | COVID-19 Vaccinated

<https://www.linkedin.com/in/shane-doherty-40a3b7196/> | <https://people.rit.edu/smd2566/portfolio/> | <https://github.com/smd2566>

Objective: Software Developer seeking a **Full Stack / Backend / .NET** development position where I can utilize my skills in C#, C, C++, JavaScript, Java and/or Python. Available starting Summer 2024.

Technical Skills: Proficiency in C# backend API development, proficiency in JavaScript frontend/backend API development work utilizing NodeJS, implementation of real time graphics APIs such as DirectX 11 and OpenGL in a C++ context, writing solutions to complex mathematical problems in Vim using C within the command-line interface, utilization of efficient data structures in Python.

Tools/IDEs: Visual Studio 2022, Unity 2018-2021, IntelliJ, Pycharm, Git, Visual Studio Code, Vim, NodeJS, Jira, Postman, Hangfire

Education: Rochester Institute of Technology, Rochester New York

Graduated with a **Bachelors of Science in Game Design and Development** in May 2024

GPA: 3.73 (**Magna Cum Laude**) | **Dean's List** Fall 2019 - Spring 2024

Transitioned from a **Software Engineering** major to a **Game Design and Development** major in Spring 2021

Work Experience: Software Developer Intern at Benefit Resource Inc, Rochester NY (May 2022 - December 2022 / May 2023 - August 2023)

- Utilized .NET framework to create a **RESTful API** in Visual Studio 2022 using C# on a development team of about 10 people.
- Participated in **Agile** development and learned strong communication skills through **Scrum** meetings.
- Experienced the **SDLC** first-hand by planning, distributing, and collaborating on tickets related to the **Acceptance Criteria** needed for the new API.
- Constructed the basis of the **MVC** architecture from scratch using secure and uniform design patterns
- Learned essential project management skills using **Jira** and **PlanITPoker** to gauge, manage and distribute work for the software development team. Also utilized **Git** for version control.
- Utilized **Hangfire framework** to create automated request calls to the API that would periodically log responses to ensure the health of the system.

Projects:

Simulated Development Builder Game (API Project):

- Utilized **NodeJS** to develop a rich web application & backend **API**.
- Implemented server communication to serve **JSON** data to the client through **requests**.
- Allowed for the transfer and display of stored images based on user requests using **static image hosting**, with real-time updates showing on screen at the time of request.
- Stored dynamic information within **containers** and **arrays**.

Driving Simulator Game:

- Utilized a **C# backend** within **Unity** to create a **3D** environment with assets that can be controlled through user input.
- Implemented **velocity vectors** and object oriented programming skills to create a **3D physics system** that allows a car to be controlled by the player, which can accelerate and decelerate based on user input, as well as move left and right.
- Created a pseudo **artificial intelligence** using path finding algorithms for the obstacles to track the player's position at all times.

"Asteroids" Inspired Game:

- Utilized a **C# backend** within **Unity** to create a **2D** environment that contains a singular asset that can be controlled by the player.
- Implemented **vector mathematics** to create the illusion of spaceship movement with automatic and gradual acceleration/deceleration.
- Implemented **random number generation** for the creation of the asteroid obstacles, as well as algorithms that determined hitbox **collision** through **position tracking**.

Interests and Activities:

- Weightlifting/Running/Kickboxing