

# Adam Zaffram

(716) 536-8861 | [adam.zaffram@gmail.com](mailto:adam.zaffram@gmail.com) | <https://www.linkedin.com/in/adamzaffram/> | <https://zaffram.com>

---

## Objective

Seeking a full-time game programming position using skills in C, C++, or C#. Available May 2024.

## Education

**Rochester Institute of Technology (RIT), Rochester, NY** Expected Graduation: May 2024  
Master of Science, Game Design & Development GPA: 3.90/4.00  
Bachelor of Science, Game Design & Development GPA: 3.96/4.00  
Awards: Outstanding Undergraduate Scholar Award  
Courses Highlights: AI for Gameplay, Game Engines, Console Development, Game Graphics Programming

## Skills

**Programming Languages:** C#, C++, C, .Net, HLSL, Blueprints, HTML, CSS, JavaScript, and Python

**Software:** Microsoft Visual Studio, Unity, Unreal, Sony PS4 Pro Devkit, Autodesk Maya, GitHub, Perforce

## Projects

**Gameplay & System Programmer, Libertalia: A Pirate's Paradise** August 2023 - Present

- Handled data persistency across all scenes and the loading and saving of player progress.
- Developed a system to procedurally generate islands with Perlin Noise and Wave Function Collapse.
- Added a friend and enemy state machine for simple auto-battling when plundering an island.
- Spearhead key gameplay features and interface interactions to provide an exciting and informative experience.

**System Programmer, Physics Engine** January 2023 - April 2023

- Implemented PhysX into a C++ game engine with DirectX 11 graphics to provide real-time physics simulations.
- Compiled a scene with Jenga and throwable objects to demonstrate rigid body behavior and collision interactions.

**Gameplay & AI Programmer, Drop7** November 2022 - December 2022

- Rebuilt the mobile game Drop7 in C# as a console app (.Net 6.0) and implemented machine learning.
- Utilized the Q-Learning algorithm to learn how to play Drop7 without a model.
- Evaluated results between smart agent and a random baseline and strived to improve performance.

**Gameplay & Systems Programmer, Camo Chameleon** August 2022 – December 2022

- Embedded an achievement system that offers optional difficulty and improves the game's replay value.
- Established varied enemy pathfinding behaviors to balance the tension and strategy within each level's gameplay.
- Developed tile-based levels with a color changing mechanic and Fog of War to mimic a Chameleon's environment.

## Employment

**Intern Programmer, Velan Studios** May 2023 – August 2023

- Worked in a team of 4 to maintain bugs and carry out feature requests in their proprietary game engine, Viper.
- Focused on Viper's Visual Scripting module and interfaced with ImGui and ImNodes APIs.

**Teacher Assistant, Rochester Institute of Technology** August 2022 – Present

- Assist in Math Graphical Simulation I class with grading and providing feedback on linear algebra concepts.
- Assisted in Interactive Media Development class with an introduction to Unity & applying linear algebra concepts.

**Emerging Technology Intern, Retail Business Services** June 2021 – December 2021

- Programed Raspberry Pi and ESP32-C3 microcontrollers with a combination of C, C++, and Python.
- Designed and developed an API for microcontrollers to alter RGB LEDs.
- Hosted servers with SSL on the microcontrollers to trigger execution of code via HTTPS requests.

**General Manager, WITR Radio** November 2020 – Present

- Oversee all station departments, host weekly meetings, file FCC paperwork, update guides, policies, and bylaws.