

# Isaiah Swinton

## Gameplay Programmer

### Contact

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[Linkedin](#)

[Portfolio](#)

### Education

DigiPen Institute of  
Technology

Redmond, WA

BS in Computer Science  
and Game Design

August 2020 - April 2024

### Key Skills

#### Programming

Game AI

Gameplay

Tools

Rapid Prototyping

Algorithm Analysis

A\*

Multithreading

Data Structures

Debugging

#### Design

Encounters

UI/UX

#### Management

Agile

Waterfall

Sprint Management

### Languages

Fluent C++

Fluent C#

Java

### Tools

Unreal Engine 5 (C++)

UE5 (Blueprints)

Unity

Excel

Git Version Control

### Summary

Diligent programmer with a passion for developing tools and systems to support fellow developers. Looking to create more creative and interesting experiences through collaboration and innovation.

### Experience

*November 2024 – Present*

**Technical Designer • Frogged By Fire – C# & C++**

- Implemented custom engine tools to facilitate in creating robust enemy and ally behaviors for the design team to modify and adjust.
- Worked closely with designers to create robust movement and camera systems to fit their specifications.
- Prototyped core mechanics to quickly test and demonstrate ideas of the team ideas to help with early project planning.
- Planned and implemented a complex cooperative AI to create a collaborative experience with AI teammates.

### Projects

*August 2023 – April 2024*

**Encounter Designer & Tools Programmer • One In A Krillion – C#**

- Built a behavior tree and a behavior tree editor for controlling enemy behaviors for gameplay and cinematics.
- Developed an enemy targeting system to manage the engagement of an encounter in real-time.
- Prototyped and implemented certain abilities to facilitate designers in evaluating clarity of mechanics.
- Designed enemy encounters to establish growth and mastery within the players.

*August 2021 - April 2022*

**Tools and Engine Programmer • Cooper's Cleanup – C++ and Lua**

- Implemented editor system for designers to quickly add and iterate on level design.
- Implemented deserialization system to allow for quick reading and writing of files using RapidJSON.
- Built a messaging system using queues within a custom engine to decouple gameplay code and to incorporate into the scripting system.
- Utilized Lua to script gameplay events and systems within the project to allow for designers to implement scripting events in game