# **Peyton James Jones**

# Objective

Passionate game developer with expertise in C++ seeking a game development or software engineer position where I can contribute to engaging games or technically sophisticated software

### Skills

Languages: C/C++, C#, HLSL, Python, JavaScript, HTML

Technologies: Visual Studio, Git, Unity, Godot, Unreal, OpenGL, Docker, Aseprite, Blender, ImGui, Steamworks, Box2D

# Work Experience

### Pizza Factory, Lake Isabella

Jan 2024 - Present

Food Prep / Pizza Maker / Cashier

- Toss, top, and cook pizza. Take orders at the register and over the phone
- Stock and prepare ingredients
- · Clean and close the restaurant, handling registers & cash

UCSC, Santa Cruz

Jan 2023 - March 2023

#### Reader/Tutor for Computational Media

- · Provided detailed critiques and feedback on students' work related to game systems and interactions.
- Collaborated with faculty to ensure accurate grading and constructive support for student development.

#### Education

#### **University of California Santa Cruz**

Sep 2019 - Jun 2023

B.S. in Computer Science: Game Design

GPA: 3.74, Summa Cum Laude

**Relevant Coursework:** Object Oriented Programming, Linear Algebra, Data Structures and Algorithms, Computer Architechture, Game Design, Game Engine Graphics, Discrete Math

# **Project Work**

Pyxis (Present): A multiplayer falling sand simulation built from the ground up in C++

- Developed a multiplayer falling sand simulation engine in C++
- · Implemented networking using Steamworks with templated messaging, enabling multiplayer functionality.
- Integrated Box2D Physics engine within the falling sand simulation, pixel-preserving rotation, and runtime deformation.
- Developed an inheritance based node-architecture for custom game objects
- · Created custom UI framework, text rendering, and resource management
- Designed a data-driven approach using JSON for custom element definitions and reactions.
- C++, OpenGL, GLFW, GLAD, ImGui, Steamworks, JSON, Box2D, Poly2Tri, SPDlog, Snappy

#### Potion Quest (2024): A 3D Puzzle explorer using Unity

- · Developed custom lighting to alter game feel
- Engineered procedural animation and AI
- Created shaders and post-processing effects to create a desired aesthetic
- · Developed most core gameplay mechanics
- C# Scripting, Unity, Post-Processing, Shaders

#### Escape From Project E.L.E.V.A.T.E. (2023): I was the lead developer for 2D Grappling platformer in Godot

- Led development of a 2D grappling platformer in Godot, focusing on character control and grappling mechanics.
- · Collaborated on asset integration and level design using team-generated content.
- Godot, GDScript, Game Design, Game Mechanics, Assertite, Asset Implementation

#### Music Is The Way (2023): Worked with a small team to develop a procedural platformer in Unity with generative audio

- Developed a procedural platformer in Unity with generative audio, creating an interactive audio experience
- Implemented data transfer between Unity and Pure Data for dynamic audio sequencing.
- · Unity, C#, Pure Data